



Chlorofibre takes 8 seconds

Nature uses the evaporation of body moisture to cool your skin when you're hot, but that evaporation can be a real killer in cold weather. If you want to keep warm, you have to keep dry – and that's where chlorofibre scores over other fibre.

Chlorofibre garments move perspiration away from the skin with uncanny effectiveness. They insulate like nothing else you've ever worn. They wash and dry easily. Most other fibres do not move moisture away, they swell and retain it. Scientific tests prove Chlorofibre moves it in 8 seconds!

The next best is polypropylene in 4 minutes.



Makes great looking Sportsmen

Peter Storm Limited, (Australasia) Pty Ltd Suite 2, corner of Polo Ave and By The Sea Road, Mona Vale, N.S.W. 2103 Australia Telephone: 997 3611 Telex: PCH AA27799

Available in White and Navy Blue





Spring (October November December) 1984, Vol 4 No 4 (issue 14) \$2.95* NZ \$3.95

- History in the Making Klaus Hueneke continues his history of the Snowy Mountains 28
- 34 Daintree This threatened Queensland rainforest is the battleground for Australia's biggest conservation fight; by Gregg Borschmann
- Ski Mountaineering New ways to ski steeper and faster slopes, with Glen Nash 46
- 50 Paddling Their Own Yvonne McLaughlin tells how women are leaving the campsite and heading
- 56 Summer in the New Zealand Alps Where, when and how to go - inexpensively and safely. A special feature including detailed surveys of mountaineering courses and guiding, by Chris Baxter, Tom Millar and Glenn Tempest
 - Editorial Stepping Out
 - Wild Information
- 19 Getting Started Hypothermia
- 27 Contributors
- 42 Folio Queensland's Birds by Cliff and Dawn Frith
- 64 Track Notes Blue Mountains Canyoning - Kanangra
- 81
- 85
- 96 Wild Shot

OFFICIAL SPONSOR Reviews Wild Gear Survey Synthetic Sleeping Bags Equipment

Cover Thirteen-year-old Anna Hueneke revives her shoulders during a family bushwalk. (See her father's article on page 28.) Photo Klaus Hueneke, Contents Pelican. (For more bird photos see Folio on page 42.) Photo Tad Janocinski. *Maximum recommended retail price only



Fance Specialists

★ Sea kayaks Australla's premier sea kayak the Greenlander ★ Folding canoes ★ flat water racing canoes and kayaks ★ Salling canoes ★ Recreation craft ★ White water craft ★ Slatom boats ★ Paddles Imported and local for every

★ Paddles Imported and local for every purpose ★ Accessories A full range ★ Hire, canoes available.

5 Wongala Crescent Beecroft 2119 (02) 84 3934

TAKE A WALK ON THE WILD SIDE.



TASMANIAN BUSHVENTURERS TOURS

Wild rivers. Mirror lakes. Secret forests. Soaring peaks. Step into the wilds of Tasmania from the luxury of your 4WD vehicle and the comfort of motel accommodation on a Bushventurer's tour.

For bookings contact: Tasmanian Government Tourist Bureau, 256 Collins Street, Melbourne. Telephone 63 6351.

Tasmania The Treasure Island

Wild Wild

Editor & Publisher Chris Baxter Design & Production Michael Collie Distribution Manager Tom Milliar Subscriptions Christine O'Brien Contributing Editors Brian Walters Reviews

Briati Waters neverses
Geoff Schirmer Interviews
Sandra Bardwell Inzek Notes
Sandra Bardwell Inzek Notes
Sandra Bardwell Inzek Notes
Stephen Burint Caving
Special Advisers Sue Ferrari (ACT),
Steve Colman, Roger Lembit, Dave
Noble (NSW), Colin Monteath (NZ),
Julian Mather (Old, Quentin Chester
(SA), Bob Burton (flas), Karen
Alexander, John Chapman, John
Siseman, Glenn Tempest (Vic), Alan
Tingav (WA).

Publisher Wild Publications Pty Ltd Distribution Gordon & Gotch Limited Printing York Press Pty Ltd. Melbourne

Subscription rates are currently \$11.80 for one year (four issues), or \$21.20 for two years, or \$29.95 for three years, by surface mail to addresses in Australia. Add \$A4.95 for each four issues to overseas addresses. When moving, advise us immediately of your new and old addresses to avoid lost or delayed copies. Please also send your address label from an envelope received with a copy of Wild.

Advertising rates available on request. Copy deadlines (advertising and editorial): 15 October (summer issue), 15 January (autumn), 15 April (winter), 15 July (spring).

Editorial, advertising, subscription, distribution and general correspondence to: Wild Publications Pty Ltd, PO Box 415, Prahran, Victoria 3181, Australia. Phone (03) 240 8482

The name Wild (ISSN 0726-2809) is registered as a trade mark, and the use of this name is prohibited. Wild is published quarterly (qlurary, April., July, Cottober) by Wild (qlurary, April., July, Cottober) by Wild Publications Phy Ltd. All material copyrights)—reserved in the publication may be reproduced without the publication may be reproduced without the prior written consent of the publisher. All attempts are made to verify advertising, track-notes, route descriptions, maps and other information, but Wild cannot be held miderally materials, an incomplete or melesdaring materials.

Contributions, preferably well illustrated with sides, are velocome. Guidelines for Contributors are available on receipt of a stamped addressed envelope. Submissions must be typewritten, double-spaced with wide accompanied by an envelope and sufficient postage for their return. Names and addresses should be written on manuscripts and photos as well. While every care is taken, we accept no responsibility for material submitted. Afficient septembers the views of the publisher.

Editorial Stepping Out

• WHILE OTHER MEMBERS OF THE WILD TEAM have been ski fouring the High Plains this wingh Plains the High Plains this wingh Plains the Plain

in early autum I visited that magnificent Tasmanian peak. Frenchmant Cap Our small Tasmanian peak. Frenchmant Cap Our small group included Mike Law (see the article on him in Wild not 11) who, on several occasions, greatly amused the rest of us by 'measuring his length, face-down under an enormous pak, in the incredible mud of the sodden Loddori Plains see the photo on page 53 of Wild no 12), on to do ten or so new rockclimbs in this outstanding wilderness area.

Now I am planning a climbing, walking and photography trip to South Australia's Flinders Ranges. You'll be hearing how we get on!

Readers using their new Wild binders to get together previous issues have not been slow to observe changes that have occurred since their first number.

Evidence of Wild's growth, in this our fourth year, will be seen in our having applied for membership of the Audil Bureau of Circulations, an international measure of the paid circulation of periodical publications. Readers will know that their support of Wild, labulated in this way, is a further sign of this magazine's standing. As part of our commitment to the 'grass roots' of the rucksack sports there is more news of club events and conservation happenings in the



Wild Information pages. We welcome details of forthcoming major events of interest to our readers, preferably in time to allow people to take part in them if they wish to do so! We look forward to hearing from you.

Chris Baxter Editor & Publisher



SILVA TYPE 27

An ounce of prevention (weighs 1 oz.). Rotating capsule in protractor base for Silva system navigating. Sighting mirror, luminous points, pin. Even a sun watch! SILVA 7NL
The world's best-selling, quality compass. Liquid-filled, rotating capsule. Swedish steel needle and sampling bearing.

SILVA Companion
Silva quality at a stocking
stuffer price. Liquid dampened,
jeweled bearing, 5° increments.
Use on zipper pull,
keychain or nendant



Disposals, Paddy Pallin, Ringwood Disposals, Mountain Territory, Mountain Designs, Sam Bear, Bush & Mountain Sports, The Wilderness Shop, Eastern Mountain Centre and all letter camping stores throughout Australia.



Wild Information

Daintree: Another Franklin?



Northern Battles. It was recently reported in 7he Age that Queensland's Douglas Shire has announced it will proceed with its controversial road through Cape Tibulation rainforest in the Daintree National Park. (See article in this issue) Once again conservationists are heading north to blockade works on the proposed road, where scores of them were arrested last December.

Another significant north Queensland rainforest area has become threatened with the State Government's announcement that logging is to start at Downey Creek, south-west of Innistail. The Queensland Minister for Forestry, Mr Glasson, was reported to have rejected conservationist's appeals by saying (of logging interests); 'Some of these people won't take "no" for an answer."

At the same time, American Dr Tom Lovejoy, Chairman of the International Union for Conservation of Natural Resources, was reported as saying that north Queensland's rainforests are the most valuable in Australia.

A prime mover in the defence of Queensland rainforest, the Australian Conservation Foundation has called for the Great Sandy region (including Cooloola, Fraser Island and the Great Sandy Strait), 200 kilometres north of Brisbane, to be nominated for the World Heritage List.

The ACF initiated and largely funded a study of Cooloola National Park to demonstrate that natural areas, especially National Parks, have significant economic value to the community. Results of the recent study showed that Cooloola had created 171 jobs and generated far-reaching economic benefit worth millions of dollars.

Nearer Brisbane, the Conondale Ranges are seen by conservationists as offering an excellent opportunity to have a large area of mountain rainforest and mixed forest protected under a National Park. They are concerned that the Queensland Forestry Department is allowing this area to be logged. Readers wishing to help protect the area should contact the Conondale Ranges Committee, PO Box 158, Malern, Queensland 4552.

 Peak Experience. Two areas of central Queensland's Peak Range were gazetted recently to bring the number of National Parks Tropical coast near Cape Tribulation. Leo Meier

in Queensland to 311. The areas declared are the Gemini Mountains and Wolfgang Peak. Their combined area is almost 1,000 hectares.

 Marathon Canoe Race. The Goodtime Brisbane Valley 100 will run over the week-end of 6-7 October.

of 6-7 October.

Entrants are faced with a 100 kilometre course; a 50 kilometre leg from the face of the Wivenhoe Dam to Colo, to be paddled twice.

The race, in its seventh year, is expected to attract over 200 entries. The entry fee is \$30. Of that, \$20 goes to the Queensland Spastic Centre, as do all the other proceeds from the day. Entries can be obtained from the Queensland Canoe Federation or Goodine Canoes. 29 [pswich Road, Woolloongabba, Queensland 4102.

Julian Mather

• Rainforest Run. During September, the rainforests of Queensland's Lamington National Park will again play host to one of Australia's most scenic long-distance runs.

WILDERNESS EQUIPMENT of Western Australia.

You will find this logo on an Australian range of lightweight outdoor equipment. It includes backpacks, daypacks, Gore-Tex® rainwear and bivouac shelters, double and single skin tents, bicycle touring gear, Hollofil® sleeping bags and insulative clothing.

Behind us is six years of production experience in modern materials and design coupled with a commitment to product durability.

The logo, two figures under a tent, is your guarantee of excellence. It represents rare, even unexpected attention to detail. Ask someone familiar with it. Then

Write for information and availability.
WILDERNESS EQUIPMENT (09) 335 2813
PO Box 83 Fremantle WA 6160

HEARD ISLAND EXPEDITION 1983

Wind, rain, snow, dust and salt. As severe a test as one can imagine. We knew there was more to a Gore-Tex* rainshell than just the fabric, 18 people now testify to that





The Lamington National Classic, now in its twelfth year and organized by the Queensland Marathon Club, is a 32 kilometre circuit from Binna Burra to O'Reillys.

JM

 Koala Disease. A documentary film completed in Queensland this year is claimed to be the first detailed study of koalas and their habitats. The film is reported to shed new light on a form of venereal disease which has substantially reduced koala numbers. A They reportedly mistook the Kanangra Creek-Coxs River junction for the Coxs River-Breakfast Creek junction and started heading south along Kanangra Creek instead of north along Coxs River. Experienced bushwalkers were baffled at their error particularly as the weather at the time was clear, and sunpy.

An extensive foot and helicopter search failed to find them until the eighth day after they had left. Fortunately for the three, one of the helicopters was manned by some canyon enthusiasts who decided to photograph Davies



Cow Bay subdivision near Cape Tribulation, Meier

Queensland University lecturer, Dr Steve Brown, believes he can cure them with a vaccine he is to import from England.

Canoeing Epics. This year's Outward Bound Hawkesbury Canoe Classic, one of Australia's major marathon cance races, is to be held on 13-14 October. The 111 kilometre race runs overnight from Windsor to Brookiny, New South Wales. It raises money for the Multiple Scierosis Society of NSW. Information can be obtained from Southern Cross Equipment and Cance Specialists (see Directory).

Another major NSW event is the Nepean River 100 Mile Canoe Race, held this year on 24-25 November. This year's event will raise money for the NSW Division of Red Cross. Details can be obtained from Alison Hughes (02) 631

The New South Wales Canoe Association is organizing a Marathon Series of no less than five events, each of 20-03 kilometres. The first is on 15 September. These lead up to the NSW Marathon Championships next March and the Australian Championships at Perth in April. The Secretary of the NSWCA can be contacted on (02) 448 0839.

In Victoria, the Geelong Cance Club is claiming two cance relay world records: 300 kilometres in 23 hours 57 minutes and 25 seconds, and 300.45 kilometres in 24 hours. Twenty-two club members, in a variety of craft, set the records (the first of their type) on the Barwon River in May.

 Eight-Day Ordeal. A party of three bushwalkers lost in the Blue Mountains of New South Wales was found eight days after they had set out from Katoomba. They had set off for a trip in the Wild Dog Mountains. Canyon. The walkers were spotted near the base of a large waterfall in the canyon, well away from the area on which police had concentrated their search. They were unharmed although short of food.

Roger Lembit

 Management Plans for Blue Mountains National Parks. Fifty years ago, in 1934, Myles Dunphy proposed a Greater Blue Mountains National Park. It is fitting that management plans for such a Park are now being drawn up.

The Blue Mountains are covered by three Parks: Blue Mountains, Kanangra-Boyd and Wollemi. With historical rather than geographical boundaries, it is sensible that plans for each Park are being drawn up at the same time.

The New South Wales National Parks and Wildlife Service is spending a great deal of effort on the plans, and draft versions should be available by September, or soon after, for public comment.

Issues to be raised in the plans include protection of wilderness, fire management, noxious weeds and animals, and the closure of four-wheel-drive roads.

Dave Noble

• Fiftieth Anniversary. Two Sydney bushwalking clubs celebrate their fiftieth anniversaries this year.

The Coast and Mountain Walkers owe their existence principally to the efforts of Ninian Melville. He also, incidentally, led the club's first 54 walks! The club has been celebrating with a number of slide nights and a dinner.

The Ramblers (formerly the YMCA Ramblers) also are celebrating their golden jubilee. A special anniversary walk or picnic is being planned for October.

DN

ARE YOU A LEADER?

Here's your chance to develop your leadership potential: maybe become a professional. OUTDOOR AUSTRALIA runs courses in leadership for rafting, climbing and, in winter, cross-country skiing.

These action-packed programs teach what you need to know to be a skilled adventurer. Who knows you may become an AHE leader!

Of course, we have many other programs designed to take advantage of the incredible Australian outdoors. Diving, hang-gliding and bushwalking are just a few of the many. Standards range from easy to the full-on challenge.

AUSTRALIAN HIMALAYAN EXPEDITIONS

SYDNEY: 159 Cathedral Street, Woolloomooloo, NSW. Tel. (02) 357-3555

Tel. (02) 357 3555 MELBOURNE: Suite 602.

Wellesley House, 126 Wellington Pde., East Melb. VIC 3002. Tel. (03) 419 2333 or (03) 419 2920

ADELAIDE: 40 Waymouth Adelaide, SA 5000. Tel. (08) 212 7857

Please rush me your FREE 32 page Outdoor Australia colour catalogue.

Name					
Address					



We know Wilderness

Walk into summer as we explore the Walls of Jerusalem, Upper Franklin, Weld River, The Gordon Splits and the now fated Henty/Anthony area. With leaders from the Society and with the valuable professional assistance of Wilderness Expeditions. the trips cater for both the beginner and

experienced walkers. For those interested in a closer look at the Tasmanian wilderness, we offer the Ecology Summer School.

Accompanied by our expert botanist, geologist and zoologist, we look at the flora and fauna of Lake St. Clair and Mt. Field National Parks, Easy walks

with hut accommodation.

SCX TETY IN

For further information: write to The Wilderness Society, 130 Dayey St., Hobart, Tasmania 7000 Ph (002) 34 9366



Let Par-Avion help with your Tasmanian adventure! We will fly you into wild Tasmania - with National Parks our speciality: Freycinet, Maria Island, South-West (Coxs Bight and Melaleuca Inlet). Cradle Mountain and more

►Personal and group transport ►Supply drops

►Regular scenic flights ►Bathurst Harbour boat

► Photography

Cambridge Aerodrome Hobart (002) 48 5390 Telex AA 57164, Devonport Airport (004) 27 9777 Telex AA 59302, Wynyard Airport (004) 42 3333, Postal address PO Box 300 Sandy Bay Tasmania 7005

Tasmania. The Treasure Island

 Conservation Conference. A conference for environmentalists was held at Lane Cove National Park in Sydney on 2-6 July. Organized by the Total Environment Centre in Sydney, the course covered issues such as politics, media. bureaucracy, private enterprise, building community support and organizing a campaign. Prominent speakers provided a comprehensive account of how to approach and influence the various sectors of society on conservation matters

Perhaps of greatest value, according to those who attended, was the opportunity to meet others working in environmental organizations throughout Australia, and to share experiences. The conference can be seen as indicative of the professional approach now being taken by environmentalists and their desire to co-ordinate conservation on a national level

The meeting was the first of its kind in Australia and conservationists hope that other such conferences will be held to enable more effective campaigning, and greater awareness of conservation issues

lo Millar



. Historic Walking Track. As part of the 1988 Bicentennial celebrations, the New South Wales Department of Lands has started work on the construction of a walking track from Gunning to Albury, retracing the epic journey of Hume and Hovell in 1824-25

Proposed Environmental Protection Laws. It is reported in the Press that the Australian Government is planning a revolutionary package of environmental controls

Proposals under consideration include protection of the bush by a ban on woodchipping of native forests, tighter control on the clearing of native vegetation and adoption of a wider definition of rainforests

Other proposals include the production of regular state-of-the-environment reports by the Government, financial assistance to States to manage World Heritage areas and to acquire critical areas of habitat for endangered species, measures to ensure the conservation of kangaroos, the location of a national register of chemicals and steps to preserve Australia's wetlands, waterways and marine areas

Penalties for offences under the 1974 New South Wales National Parks and Wildlife Act were substantially increased last January. Heavy fines or several years' imprisonment can be the 'reward' for conviction of damaging or possessing certain flora and fauna.

· New Park. The Warrabah National Park, near Armidale, New South Wales, was recently

announced Comprising 3 396 hectares, it is on the Namoi River

· Awards. The annual Park Writers' Awards. funded jointly by the National Parks and Wildlife Service of New South Wales and the Literature Board of the Australia Council, are made to raise public awareness of environmental issues.

In the 1984 awards, Robert Adamson of Sydney was awarded \$6,000 to work on a book of poetry on Brisbane Waters National Park Mark O'Connor of Townsville was awarded \$3,350 for work on poetry on the Blue Mountains and Royal National Parks, Janusz Rygielski of loswich has been awarded a \$520 supplementary grant to complete his work on Kosciusko National Park.

· Fire. A research fellow at Canberra's National University is quoted in the Press as saying that a single major fire can permanently change a forest. Dr David Green is reported to have told a recent conference that rainforest, particularly, was vulnerable to permanent loss from fire. To save such areas it is important to control access to them, he said.

. Kosciusko Capers. The twentieth Paddy Pallin Cross Country Ski Classic was held on 4 August. To celebrate the twentieth anniversary of the event there were two races this year the normal Classic (25 kilometres) and a new event, the Paddy Loppet (42 kilometres). Visiting Japanese skiers won both events and filled the first three places in the Loppet. The winners were T Mamba (two hours, nine minutes and 51 seconds) and A Egawa (one hour, nine minutes and two seconds). The first woman in the Classic was Kate Crowley in twenty-seventh place (one hour, 39 minutes and 46 seconds).

(Paddy Pallin has produced, on behalf of the New South Wales Ski Association, a useful pamphlet on cross country skiing in NSW. It includes general information on the sport and on hypothermia.)

The NSW Government has given the goahead to the first stage of the underground railway reported in Wild no 8. The \$30 million railway - the ski tube - will be 3.5 kilometres long, under the Rams Head Range. The first stage is to be open by 1986. Already local ski accommodation businesses are cashing-in on the ski tube in their advertising and the NSW ski resort industry is seen by observers as being in for a period of substantial expansion.

• Tour Off. A tour of Australia by popular British conservationist, Professor David Bellamy scheduled for June was cancelled

· Redevelopment Plans. Plans are apparently afoot for the Committee of Management of Victoria's Mt Buller ski resort to oversee the 'redevelopment' of the area by spending some \$60 million over the next five or six years. The plans are reported to involve a \$30 million redevelopment of the Kooroora Chalet as 'a three-star hotel with apartment blocks'.

. Classic, The Wildtrek Winter Classic, 1984. was held in the Omeo/Mt Hotham area of eastern Victoria on 21-22 July.

With 32 combination teams (six members each) and 14 marathon teams (two members each), entries were double that of the 1983 inaugural event

The course consisted of four sections on the Saturday, cross country skiing, running, cycling and canoeing, totalling 95 kilometres, and three

Wildtrek Classic 1984: Frank Lynch ponders the fate of his canoe which is submerged in the Mitta Mitta River and, above, the cross country run section. Kaine Pinder





Map Protection

Peruse and protect your maps and notes even in the foulest weather, inside an Outgear Mapcase. An important aid to navigation, it has been designed to



stand the test of time and is made from quality, proofed fabric and UV- and freeze-resistant clear plastic. The Outgear Mapcase has a flexible access throat with a Velcro® closure, four lanyard attachment points

and is available in three

The Warm and Luxurious Silk Sleeping Sheet

Nothing less than the warmth, comfort and compactness of an Outgear Silk Sleeping



Sheet will complement your sleeping bag. It crumples into a tiny 7 x 18 cm suff sack stow away in any

and will stow away in any pack. Made from pure Chinese silk and a roomy 85 cm wide, it is available in medium (185 cm, 120 g) and large (210 cm, 150 g) sizes. Silk has demonstrated its strength

and durability for centuries and is easily hand washed or dry cleaned. Enjoy the warmth and luxury of pure silk!

Outgear Yandee Day to Day Pack

This 24 litre, top loading Cordura campus and day pack is ideal for anyone who carries a pack daily. Designed to last, like all our products, the Yandee features a closed cell foam. back support and padded shoulder straps a throat with draw cord, elasticized lid large zippered rear pocket, hang loop and hip belt. For the safety of cyclists, joggers and school children, the Yandee has a highly reflective stripe. You'll carry your day to day loads with comfort and safety for years to come in an



Outgear Yandee

Outgear down-to-earth products are available at selected bushwalking and camping shops.



DOWN TO EARTH PRODUCTS

Trade enquiries: 12 Williamson Road Maribyrnong 3032. (03) 317 8886.



THE WOBBYGONG

WHEN THE GOING GETS ROUGH
GET A B-LINE CANOE

B-LINE CANOES AVAILABLE

DIRECT MAIL ORDER AND FROM SELECTED STOCKISTS THROUGHOUT AUSTRALIA.

CHOOSE FROM A RANGE OF CANOES & KAYAKS IN FIBREGLASS AMD CROSSLINK POLYETHYLENE FOR YOUR KIND OF CANOEING

PLUS ACCESSORIES TO SUIT

Take away go anywhere Canoe Hire available from Sydney and Gloucester N.S.W.

SEND THE COUPON FOR YOUR BROCHURE AND COMPETITIVE PRICES NOW. EXTENDED PAYMENT PROGRAMS & BANKCARD.

B-LINE BOATS & CANOES PTY LTD

PO Box 39 Gloucester NSW 2422 Please enclose 3 current postage stamps. No envelopes.

NAME						
STREET						
TOWN SUBURB			POSTCODE			
NEAREST A						
PLASTIC CANOES		FIBREGLASS CANOES		CANOE		W 83

sections on the Sunday (skiing omitted), totalling 34 kilometres. It was a demanding course, with perhaps the cross country run being considered the most difficult section.

Times were faster on all sections compared with the previous year. Competitors showed greater preparedness, and standards were high. The Pinball Machine rapid on the Mitta Mitta River was the cause of many paddlers' undoing. One down-river racing boat ended its career

wrapped round a rock.
Hallmark was again the major sponsor of the

The winning combination team was Mark Johkins, John Jacoby, Tony Zarbst, Carg Paul, Trevor Paul and Michael Walters, They completed the seven sections in nine hours 24 minutes and 41 seconds. The winning marather learn was Bod Harris and Rio Zmith. Their lime was 11 hours three minutes and 11

Last year's winning teams both came second in their respective categories this year. The

competition will be hot for next year!

Yvonne McLaughlin

Troimo mozaagiimi

Thomson River Canoe Trail. At the instigation of the Victorian Department of Youth Sport and Recreation, a working party has been established to investigate the development of a 'canoe trail' on the Thomson River.

The working party consists of representatives from the Department of Youth Sport and Recreation, Victorian Canoe Association and various Government Departments. Its primary aim is to promote the safe use of the Thomson liver for canoping, raffiting and other purposes.

The section being considered is from Lake Thomson Dam to Cowarr Weir, a distance of approximately 50 kilometres. This section passes predominantly through State Forest and close to the historic Walhalla gold mining area. It encompasses a variety of water conditions, including the Thomson Gorge.

 Rogaining. The Victorian Championships were contested by a field of 250 at Mt Despair in May. Overall winners were Tony Brown and Matt Campbell, closely followed by David Church and rogaining novice Craig Nottle (who is currently attempting to climb the West Ridge of Mt Everest).

The fifth Australian Championships were to be held in August in the Southern Tablelands of New South Wales. We expect to report results in a subsequent issue.

- Yarra. The Upper Yarra and Dandenong Ranges Authority has produced a management strategy plan for the 120 kilometre section of Victoria's Yarra River from the Upper Yarra for to Warrandyte. The aim of the plan is to coordinate management of the river which regarded as one of Melbourne's most valuable resources.
- Barmah. Another Victorian waterway area that has been in the news is the 28,500 hectare Barmah Forest on the Murray River. It has one of Australia's finest stands of red gum and over 200 species of birds. The Victorian Bird Observers Club claims that cattle grazing is affecting the delicate ecology of the area affecting the delicate ecology of the area.
- Diary. The 1985 Australian Conservation Foundation Wilderness Diary is an interesting variation on the increasingly popular wilderness calendar' market. The ACF has produced an attractive desk diary containing 55 colors photographs of some of Australia's finest

wilderness areas. Kakadu, South-west Tasmania, Cape Tribulation and Errindundra are among the areas depicted, and with printing of a quality not often seen here, the diary should prove popular. It is available from the ACF, 672B Glenferrie Road, Hawthorn, Victoria 3122 for \$12.95 plus \$1.50 for postage.

- Birds. The Royal Australian Ornithologists Union is publishing a 1985 calendar that includes 13 colour photographs by leading bird photographers: \$8.00 each, including postage, from RAOU, 21 Gladstone Street, Moonee Ponds, Victoria 3039.
- Timber! The Victorian Timber Industry Enquiry, reported in Wild no 13, is expected to produce its final report in May 1985. The Chairman, Professor Ian Ferguson, has held interviews in Melbourne and 12 other centres. Written submissions closed on 31 July. There is then to be a series of public hearings in four Victorian centres in August and September.

 Scouting for Business. In August the Scout Outdoor Centre opened a major new shop at 360 Lonsdale Street, Melbourne.

Claiming to cater for the novice bushwalker as well as the experienced gear freak! Via as well as the experienced gear freak! Vii indicates the significant 'up-marker' move made by at least some of Australian socuting's retailing arm in recent years. (Funds generated by the South Outdoor Centre are said to be directed entirely to youth work through the South movement).

- Touring On. The Ski Touring Association of Victoria has commissioned an investigation into the demand for cross country skiing and what motivates people to take it up and continue with it. STAV hopes the research will enable planning and development for all cross country skiing in Victoria. The results of the study are expected to be available in December.
- Grampians National Park. On 1 July the Honourable Rod Mackenzie, Victorian Minister the Carmpians National Park and urveited an appropriate commemorative plaque, during a short ceremony at the Borough Huts camping area, within the National Park. Over 500 people were present from a wide range of organizations (some of which have bitterly opposed the National Park) to witness this realization both of an election promise by the Victorian Government and of the long-heid ambition of Covernment and of the long-heid ambition of dutable extraordinary natural features of the Grampians.

John Miller, formerly of Wyperfeld and Brisbane Ranges National Parks has been appointed Rangeri-n-Charge of the new Park – Victoria's largest, at a daunting 167,000 hectares. Staff of the former Forests Commission employed in the Grampians will remain in their jobs. The extent of new appointments remains to be seen.

Management of the Park will eventually become the direct responsibility of the new Regional Manager of the Department of Conservation, Forests and Lands based in Horsham. The National Parks Service will then relain a planning and monitoring role for the Grampians National Park.

Meanwhile, the Service's Grampians Planning Team has completed stage one of the preparation of a management plan — the publication of a comprehensive resources inventory for the National Park. Closing date public submissions on the management



KINGDOM IN THE SKY

Trek the vertical world of the Himalaya. Namche Bazar, Langtang, Gokyo, Kashmir. Absorb the magic of the most magnificent mountain range in the world.

The Outdoor Travel Centre has the experience to organise your adventure holiday. Efficiently, no fuss.

Trekking, canoeing, rafting, cycle touring, climbing, ski touring even camel safaris. We can give you the holiday of your life!

outdoor travel centre
wilderness Adventures Worldwide
377 Little Bourke St Melbourne
Tel (03) 677 252

Please rush me your Adventure Holiday brochures. Name Address

My special interests -

As the seasons change, we will meet your needs



tone central location!

3 Trelawney St Eastwood 2122 Phone (02) 8583833 Proprietors: Jack, Nancy & David Fox

TODAY

Your Greatest Need



WHOEVER YOU ARE

IS TO KNOW AND UNDERSTAND YOURSELF

OUTWARD BOUND is a unique educational experience — a powerful mirror that helps you to see yourself in the great Australian Outdoors.

MOUNTAINS • INITIATIVE • RIVERS • FRIENDS • EXPEDITIONS • PROBLEM SOLVING • CAVES • CHALLENGE • GROUPS • ADVENTURE

Combine them & you have OUTWARD

To find out more telephone Sydney (02) 29 7784 or send the adjacent slip.

	D BOUND FOUNDATION, D. SYDNEY 2001.
Please send me	e information on
STANDARD COURSE	ADULT COURSE [
(17-29 years)	(over 30 years)
PACK & PADDLE (Boys 12-1	6, Girls 12-16) 🗆

ADDRESS:

P/code.....Ph. No.

implications listed in the document was 31 August but late submissions will be accepted. This is your first chance to have a say in how the National Park will be run Copies of the inventory, or of a shorter summary of the inventory, or of a shorter summary have been been been summary parks. Service, 240 Victoria Parade, East Melbourne, Victoria 3902. Send your ideas to the Grampians Planning learn, PO Box 201. Stawell, Victoria 3900. The draft management plan will be available for public comment and submissions in February 1985 and the final management plan will be completed in June 1995.

Sandra Bardwell

Speleomania. The fifteenth blennial conference of the Australian Speleological Federation will be held in Hobart next January. The conference will emphasize modern caving techniques, surveying, and carlography using computers. This emphasis is in line with the reputation fasmania has acquired for its deep, was and techniques porting caves. Surveying was and techniques porting caves. Surveying the properties of the prope

For those wishing to participate in some of the imminent discoveries there will be both preand post-conference field trips. This is an ideal opportunity to visit some of Australia's best caves including the longest, the deepest and

the most beautiful.

The dates are 7-10 January 1985 and accommodation is at the Lea Scout Camp in Hobart. For more information or a booking form, contact Speleomania, PO Box 121, Moonah, Tasmania 7009.

Stenhen Runton

■ International Conference Postponed. The ninth conference of the International Union of Speleology, due to be held in Spain in July 1985, has been postponed indefinitely. No reasons have been given. A large contingent of Australians usually attends these IUS conferences which are normally held every four years.

SR

• Solo Cave Diving. A number of Australian sessua divers have recently extended their interests to include cave diving, mostly at the vigitile location of MI Gambier. Similarly, as Similarly, as Cave and Chastralian cavers have learned scube diving techniques to extend the limits of cave exploration. Most of Australia's deep caves end in sumps where water floods the passage to the vigit of the cave of the control of the

A group of Tasmanian cavers/cave divers has been very active in the Junee-Florentine area. The most notable of these are Stefan and Rolan Eberhard who have discovered and explored many of that State's deepest caves. The brothers are cave divers as well as cavers.

The most recent notable achievement in the area was the exploration of Pendant Pot which was thought to join Growling Swallet. Pendant Pot ended in a sump which according to the survey was a mere 30 metres from known water in Growing Swellet. This prospect made it possible for a classic through trip. Polan Eberhard made this first trip sol. Ne abseiled down Pendant Pot, pulling his ropes down behind him. At the entire liat ske donned his diving gear and baby bottler divided through the sump earl artived in Growling Swellet where it was a streightforward trip out to the entrance.



Enjoy sleeping comfort when you pack light Carry a half pound less. Using the Therma-Rest* concept and technology, the UITRA UTE, a foom-filled air mattless, self-inflated to 20"x47"xi; rolls to 3"x17"; weighs only 17 aunoes. Regular weight Therma-Rests* in 47" and 72" lengths, Couple Kits^{1M}, Pocket Pillows^{1M}, and Stuff Sacs^{1M} are available. Sold coast to coast. For dealer nearest you, write:

Grant Minervini Agencies Ptv Ltd PO Box 209 Welland SA 5007 Phone (08) 46 6061





Available from all good outdoor shops

Take the disease out of water with **Puritabs***

Reduce the threat of gastrointestinal upsets such as diarrhoea caused by water-borne disease – treat your drinking and cooking water with Puritabs, the effervescent water purification tablet.

- \blacksquare Designed for water bottles, billycans, etc., Puritabs wipes out micro-organisms in water. One tablet purifies one litre of water in 10 minutes or two litres if left for 30 minutes.
- Virtually tasteless in water, they dissolve rapidly. Foods, beverages and concentrates prepared with such water are unchanged in flavour or appearance.
- Available in packs of 36 (3 strips of 12 tablets in foil) from leading retail pharmacies, camping and disposal stores and Scout Outdoor Centres.

Puritabs-Maxi bulk water purification tablets now in foil packets of 30.



SCHERING CORPORATION U.S.A. Australian Subsidiary: ESSEX LABORATORIES PTY. LTD. Baulkham Hills, N.S.W. (02) 624 4444

Health care is our business





Torre Skepping bags individually handcrafted for discerning people.

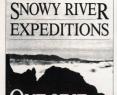
Custom down gear a

speciality.

Full & comprehensive range of quality lightweight wilderness & climbing

equipment.
mail order or

10/600 Sherwood Rd. Sherwood. Qld. 4075.



Write or phone for information. PO Buchan Victoria 3885. Phone (051) 55 9373. (051)

Wilderness Tours

Lightweight hiking and camping in Tasmania's South-west wilderness. Tours available include South Coast Track, South-west Cape are

South-west Cape area, Port Davey standing camps. For further details contact:

Wilderness Tours Geeveston Tasmania 7116 (002) 97 1384 or any

office of the Tasmanian Government Tourist Bureau.



PO Box 93 Twizel. Phone 737.
Nick Banks Gary Ball Russell Brice
Private Courses and Gulding
8-Day Mountaineering Courses
14-Day Alpine Climbing Courses
Hell Skiing
Nepal Treikking and Expeditions
Ski Hire and Retail Shop

• Tasmanian Forests Campaign. In Tasmania, the forests campaign has replaced the Franklin as the dominant environment issue. It is spearheaded by the Forest Action Network (FAN) a coalition of national and local groups which includes the Wilderness Society and Australian Conservation Foundation.

FAN is proposing National Park extensions to protect wilderness and for scientific purposes. These areas contain rainforest, the world's tallest eucalypt stands and remnants of ye eucalypt communities. The major proposal is for an enlarged Western Tasmanian National Park.

At the same time, FAN researchers are developing an alternative forest management plan to maintain or increase employment in forest industries. FAN is allo seeking better logging practices.

The main focus at present is the environmental impact statement on export woodchip licences. The draft will be published in September and there will be a two-month period for public comment.

The Franklin may be safe, but much is still at risk. Forestry threatens 29% of Tasmania's remaining wilderness area. Further information: Jonathan Miller, 102 Bathurst Street, Hobart, Tasmania 7000. Phone (002) 34 5566.

Franklin Compensation. In Wild no 13 we reported that the Federal Government had offered Tasmania some \$270 million in compensation for the Franklin River decision. The agreement between the two governments has now been settled, but the Wilderness Society says it may challenge the compensation scheme in court.

• Freycinet Feat. The beautiful Freycinet Peninsula on Tasmania's east coast is to be the scene of the Freycinet Foot Flogging Club's inaugural runs on 30 December (see Club News).

 Coasters. The 1985 Coast to Coast race across New Zealand's South Island will be held on 2-3 February. The race involves running, cycling and kayaking.

 New Route. Rob Hall and Steve Lasche made the long-awaited winter ascent of Mt La Perouse in New Zealand's Mt Cook National Park in June. They climbed the East Face, from Gardiner Hut.

Colin Monteath

New Zealand's Deepest Cave. Over recent years cave explorers have extended the limits of Nettlebed Cave near Nelson. Each Christmas the New Zealand Speleological Society has mounted an expedition to the area. Numerous Australians have participated in these expeditions.

Nettlebed Cave is located near the Pearse River Resurgence at the base of the MI Arthur Matble Massif. The cave extends uphill following the design of MI Arthur. The highest point in the cave is now 685 metres above the level of the Pearse Resurgence. This makes Nettlebed Cave the deepest cave in both New Zealand and the Southern hemisphere.

in an attempt to find the top entrance to the Nettlebed system, many new caves have been explored on 'the tops,' the slopes of MI Arthur itself. The most notable of these caves is simply called HH which sinks to a depth of approximately 620 metres. HH has not yet been fully explored, or surveyed. It could prove to be New Zealand's deepest cave or cit governor New Zealand's deepest cave or cit governor to consider the country of the country of the New Zealand's deepest cave or cit governor to country or country or country or the country of the country or the country or the country or c

SPECIAL HOLIDAYS

mall group travel with activity or special interest themes for the discerning traveller. Over 800 people have holidayed with 'Bogong Jack' in the valleys and mountains of NE Victoria — some for their fourth time.

Bicycle Touring, 1 to 7 days
Trout Fishing, 5 days
Backpacking, Trekking, 1 & 5 days
Horse Riding, 5 & 7 days
Snow Shoeing, 1 to 5 days
Family Holidays to suit

Alpine Wildflowers, 2 & 5 days Multi-Adventure, including hot air ballooning, 5 days Painting Tours, 5 days

Painting Tours, 5 days Alpine History and Huts, 2 & 5 days Rafting, 1 & 2 days Nordic Skiing, 1 to 6 days

Most holidays are all-inclusive ex Wangaratta. Contact the gentleman bushranger for a free brochure:

Bogong Jack Adventures PO Box 209 Wangaratta 3677. Ph (057) 21 3145, Melbourne (03) 67 7252, Sydney (02) 960 1677, Adelaide (08) 212 7857 or Victorian Government Travel

Centres

1 3145, 57 7252, 1677, 2 7857 Polynology ADVENTURES

Suppliers of superior quality synthetic clothing for the ski tourer, alpinist and bushwalker. Soft and handsome Polarfleece

ALP SPORTS





Good things come in small packages.

«The Standhart» by Mountain Designs

- Universal application. A true 4-season bag.
 Warm to -12°C*
- Double zip configuration for ease of entry and ventilation
- Cocoon hood
 minimises heat loss
 doubles as a
 pillow holder
- Comfortable tapered tulip shape with box foot
- 700 gms of finest
 Superdown held in
 correct density/loft relationship
- Sewn cross block baffles
 ensure no down shift

Brisbane 99 Mary Street (07) 221 6756 Sydney 494 Kent Street (02) 267 8238 Canberra Custom Credit House 38 Akuna Street (062) 47 7153 Melbourne 61 Hardware Street (03) 67 2586



- 3D draft tube continues full loft of bag across zipper – no cold spot
- Unsurpassed warmth/weight ratio makes this bag exceptional value for the lightweight camper
- Light and compact at 1400 gms means your rucksack will hardly know its there
- Guaranteed for a full five years against faulty

tull five years against faulty materials and workmanship.

*To reach the minimum temperature rating, a sleeping bag must be insulated in some manner from the ground to prevent heat transfer.





• FRANKLIN (Tas) • NYMBOIDA (NSW) MITTA MITTA (Var) SNOWY (Var) and many more spectacularly exciting rivers

Whitewater rafting...feel the tingling spray, the adrenalin flow & the foam surge round your paddle. The thrill of a lifetime plus relaxing round the campfire with new friends. Join the original team, still no. 1 for service, safety & fun. Skilled boatmen, the world's finest inflatable rafts, all equipment & plenty of good food are provided. No experience needed, just an

adventurous spirit Call us now for brochure SAILING . BACKPACKING ALSO . HORSERIDING . SKIING

dtrek

414 BOURKE ST., MELB. Ph 67 7196 (197 CLARENCE ST., SYD. Ph 29 2307 the non-profit educational organisation

CANOE & CAMPING SUPPLIES

LARGEST RANGE OF **CANOES & EQUIPMENT** IN N.S.W. FOR **COMPETITION & LEISURE**

COMPLETE CAMPING & **BUSHWALKING STORE** HIRE

265 VICTORIA RD. GLADESVILLE, 2111 SYDNEY PHONE (02) 89-5590

> RETAIL & MAIL ORDER 9-6 Monday-Friday 9-9 Thursday 8-4 Saturday

into Nettlehed Cave which would increase the denth of the whole system to approximately 850 metres

The Nelson region has long provided an opportunity for cavers to explore good, deep, sporting caves. Many, such as Harwoods Hole and Greenlink, have become classics. Harwoods Hole has a 176 metre free-hanging abseil entrance and a superbly decorated streamway leading to Starlight Cave, Greenlink follows a fast flowing river down a series of waterfalls - over 20 pitches in all. There are two sumps at 287 metres depth followed by a 44 metre pitch down the middle of the water The cave ends in a rock pile at 372 metres. The rock pile has not been fully investigated. The return trip to the end of the cave takes over 20 hours, so exploration has been abandoned for more tangible objectives.

With such a wealth of cave potential it is easy to see why so many Australians make a trans-Tasman pilgrimage each year. SB

 Australians on Mt Everest. The two 1984 Australian Everest expeditions mentioned in Wild no 13 are currently on the mountain. We expect to have full details of both attempts in our next issue. The attempt from Tibet will be filmed for international television release next February

Greg Child writes that he has changed his mind about going to Mt Everest in an American expedition next year.

. Mountain Films. The ninth annual Banff Festival of Mountain Films will be held on 2-4 November, Details: PO Box 1020, Banff, Alberta TOL OCO, Canada

· More on Yosemite. Following our report in Wild no 13 more information is to hand on Tony Dignan's El Capitan climbs. He climbed The Nose in two days and it was on Pacemaker that he and his partner ran out of food - for seven days!

· Corrections. In Wild no 13 we misspelt gentoo (penguin) in the photo caption on page 45, and Fischer (skis) in the table on page 79. 'Ski contact length' (figure 1 on page 78) was incorrectly shown. It should have been shown as the distance between the two points on which an unweighted ski rests. The text, only, in the box on page 65 of issue 13 should have road

Ben Boyd National Park flanks Twofold Bay and the township of Eden on the south-east coast of New South Wales. The northern section which is reserved for day use is bordered by the Pambula River and Lake. The southern section extends past Green Cape, with its disused lighthouse, to Disaster Bay. Care should be taken when approaching this area because the narrow forest roads have to be shared with heavy logging vehicles working in the adjoining State Forest.

Camping. No camping is allowed in the northern section. Basic camping facilities are provided at Saltwater Creek and Bittangabee Bay in the southern section. Bookings are necessary for holiday periods. There are serviced commercial camps at Eden. Twofold Bay and Pambula

Park Office. PO Box 186, Eden, NSW 2551. Maps. National Mapping sheet Eden covers most of the Park, while small sections are contained on Green Cape and Bega (all 1:100,000). Central Mapping Authority sheets Kiah, Pambula and Eden (all 1:25,000) show excellent detail. The New South Wales State Forests sheet Eden (1:125,000) is also available.

Spring Specia

WHILE STOCKS LAST Be Quick!!! OWE "TRIOLET"

15.600

with all the features that have made Lowe famous.

Made of Heavy Duty coated nylon Fully adjustable back & padded waist hand -COMFORT ASSURED! Compression etrane

Cordura base.

30.000 FOR WEEKEND TO EXTENDED TDIDS WAS \$160 Rugged double

Fairydown

'SNOWLINE'

well suited to almost all Australian conditions. SUPERB DOWN QUALITY!

Slant Wall Rating: -7°C Differential cut Total weight: Fill: 650g of 1350a 95% down 550 loft



Eastern Mountain Centre



CAMBERWELL JUNCTION

401 Riversdale Rd. 3123 (300m City side. Cnr Redfern Rd.) Phone: (03) 82 7229

HEATHMONT

115 Canterbury Rd. 3135 Phone: (03) 729 7844

Prepare yourself for an adventure

- Canoes and accessories from Australia's top suppliers: Canoes Plus, Outdoor Survival suppliers: Canoes Plus, Outdoor Surviva and Driclad buoyancy vests • Eurekal, Black Ice and Jansport tents

 - Lowe, Macpac and Karrimor packs ● J&H, Fairydown and Mont sleeping bags

 - Scarpa, Raichle and Asolo boots
 - Occupa, naterne and \$350 50003
 Chouinard, Interalp and Edelrid climbing gear Choumard, interarp and Edema climbing gear
 Karrimor, Hiker Biker and Guardian cycle gear



377 Little Bourke Street Melbourne 67 3355 CAGA Centre Akuna Street Canberra 47 7153

Getting Started Hypothermia

How to handle it, by Yvonne McLaughlin.



• HYPOTHERMIA (EXPOSURE) IS THE CONDITION associated with the dangerous lowering of the body core temperature. The brain, heart, lungs and other vital organs cannot function if their temperature falls too low. The onset of hypothermia can be swift, and if it is allowed to progress unrecognized, death can follow within one hour.

The real danger of hypothermia is that it is not easily recognized, either by the person affected or by his companions. In fact a whole party may be, more or less, affected without anyone being aware of it.

Anybody can get hypothermia. Any combination of wind, water or cold should be regarded as potentially dangerous, alerting you to the possibility of hypothermia. Consequently, whatever the activity, length of trip or time of year, you must be prepared for bad weather conditions. This means windproof and waterproof outer clothing, woollen clothing, hat and gloves and appropriate footwear for skiing, walking and other outdoor activities

Canoeists and rafters should always be warmly dressed, either in woollen clothing and/or a neoprene wetsuit, with a windbreaker lacket. A woollen hat under the helmet is worthwhile, as up to one third of the body's total heat loss can be through an unprotected head.

While skiers and walkers usually keep dry in the normal course of events, canoeists and rafters are generally subjected to continual wetting, even in the absence of capsizes. Wet clothing drains heat from the body at an Not much chance of exposure here! (In Cascade Hut Snowy Mountains, New South Wales.) Rod Murphy alarming rate. The thermal conductivity of water is 25 times greater than air. Complete immersion can lead to serious consequences in cold, windy conditions

For safety, four is the minimum number for a party. A party of two is too weak to help itself in a dangerous situation. If four are in the party, one can stay with the sick person while two go for help. All party members should be aware of the dangers of hypothermia, and should learn to watch each other (the buddy system) for

Those most likely to develop hypothermia are the unprepared, the unfit, thin people with little fat to act as insulation, the young (under 17) and the old (over 65), and people who have been ill or injured recently. Low morale, possibly due to the overwhelming nature of a situation, or inexperience may lead to a greater susceptibility to hypothermia. Other things being equal, men are more susceptible than women, who have more fat per unit of body weight and a greater tolerance to physical stress.

The first symptoms of hypothermia, lack of co-ordination, slurring of speech, irrationality, weakness and shivering, are frequently mistaken for simple fatigue. If not recognized and treated, the victim is on a rapid downward spiral. The stages of hypothermia, in order of increasing severity are

37°C normal body temperature 37° - 35°C sensation of coldness, skin numb,



Take a walk on the Wild side in these long-sleeved cotton and polyester windbeaters to fit chest sizes 85, 90, 95, 100 or 105 cm. Blue writing on cream. Only \$17.95 each (including packaging and surface postage anywhere in Australia: add \$A2.50 for each garment to overseas addresses). Send cheque/money order and details, including size, to Wild Publications Pty Ltd, PO Box 415 Prahran, Victoria 3181,

Our accountant thinks we're mad!

The bank manager thinks we should be committed! We think bushwalking and other wilderness pursuits shouldn't be a wealth hazard! Come with us to the great outdoors!

BRING THIS AD FOR A 15% DISCOUNT DURING SEPTEMBER 84

· Top tents · Rugged packs . Bags to dream in Boots to climb in Gear extraordinare!



275 Hampton Street Hampton Victoria (03) 598 7870 Telex AA 38029

FROM THE START YOU CAN RELY ON



southern cross equipment

The outdoors people more people rely on.

Reliable and experienced staff offer expertise in the selection of bushwalking tents. rucksacks, expedition sleeping bags and specialised clothing selected from top manufacturers, through to large family tents and a range of stoves, lights, portable toilets and refrigerators, plus a host of camping accessories.

Our stores offer topographic and tourist maps, Y.H.A. membership facilities and, through our service branches, the hire of camping equipment and canoes together with repair and maintenance on a wide range of items.



SOMERSET

Would your group, club or school like to enjoy the experience of camping, orienteering, canoeing, rockclimbing or bushcraft? Our Outdoor Education Centre "Somerset" on the beautiful Colo River is available for groups from twenty-five to one hundred or more at reasonable rates.

Why not call into any Southern Cross store, see the latest in equipment and ask for a brochure on "Somerset", a new direction in outdoor education.

HORNSBY: 222 Pacific Highway, 476 5566

CHATSWOOD: 399 Victoria Avenue. 412 3372

SYDNEY-355 Kent Street, 29 4526

PARRAMATTA: 28 Phillip Street. 633 4527

southern cross equipment. The outdoors people more people rely on

Rafting Equipment

For all your rafting needs this summer, see the experts.

- Rafts
 Helmets
- Buovancy vests
- Paddles
 Wet suits
- Barrels Information

Complete rafting kits

Canoes Plus
140 Cotham Road Kew 3101
Phone (03) 80 5934

AFRICA, ASIA, SOUTH AMERICA

Since 1963 Encounter Overland have successfully organised and operated long-range expeditions and, more recently, have established shorter Brief Encounters.

Our rugged, specially-designed vehicles enable us to get well off the beaten track to fully experience lands and peoples of the present and the past.

TRANS AFRICA 9- to 31-week expeditions Johannesburg to London

TRANS ASIA
13-week expeditions
Kathmandu to London,
SOUTH AMERICA
9- to 21-week
expeditions
Rio to Barranquilla.

BRIEF ENCOUNTERS 4-day to 8-week acti holidays in East and West Africa, India, Nepal, Peru and the

Nepal, Peru ar Amazon. Full details:

ENCOUNTER OVERLAND Ltd

SYDNEY: 75 King Street, Sydney, NSW 2000 Tel.: 29 1511 MELBOURNE: 520 Collins Street, Melbourne, Vic. 3000. Tel.: 62 1263

BRISBANE: 288 Edward Street, Brisbane, Old. 4000. Tel.: 221 8825 ADELAIDE: 128 Adelaide Arcade, Adelaide, S.A. 5000. Tel.: 2223 1243 PERTH: 2nd Floor, 13 St. George's Terrace, Perth WA. 6000. Tel.: 232 7335 poor co-ordination, shivering begins

35° -34°C more obvious unco-ordination and weakness, confusion and apathy, still shivering 34° -32°C serious muscular unco-ordination, mental sluggishness with slow thought and

speech, loss of memory, still shivering 32° - 30°C shivering stops, stiffness, inability to walk or stand; incoherence, confusion, irrationality, skin cold to touch, blue or outfy

irrationality, skin cold to touch, blue or puffy 30° - 28°C semi-consciousness, dilated pupils, heart beat and pulse not apparent

28° - 25°C unconsciousness, followed by death due to heart stopping

Cold water immersion will produce hypothermic symptoms and sudden immersion in water colder than 10°C causes immediate and intense difficulty in breathing. Gasping and inability to control breathing may cause a swimmer to panic. Even when wearing a wetsuit, a cold swim will reduce co-ordination and dull reactions dramatically.

Whenever the head is covered by a wave (even if only for a few seconds) a swimmer is likely to inhale water. The gasping and rapid breathing can produce hyperventilation within ten seconds, and this can lead to uncon-

sciousness.

Depending on the kind of protective clothing worn, a swimmer's core body temperature drops from 37°C to about 35°C in two to ten minutes. At this low core body temperature useful work becomes difficult and often impossible.

impossible the cold water, the swimmer's bedy automatically responds by cutting off blood circulation to the skin in an attempt to conserve heat. Reduced blood circulation prevents the transport of energy supplies required by the muscles to perform voluntary work. Thus voluntary movement of the extremities becomes increasingly difficult, sapping body strength and increasingly difficult, sapping body strength and swimmer must get out of the water as quickly as possible, and will usually need his as possible, and will usually need his

companions' assistance. Still unexplained is the sudden onset of severe exhaustion experienced by even exhaustion experienced by even cold water (4* to 5°C). It is thought to be related to the high viscosity of the cold water which requires increased effort to produce swimming movements. This might explain the 'sudden with the 'sudden in the 'sudden

in very cold water.

The ambient winter temperature of southern inland rivers is about 7℃. Extra care should be taken on the very cold waters of snow-fed rivers, and rivers where water is released from a storage dam, and on deep lakes.

solution of the control of the contr

Give warm, sweet drinks and easily digested food. He must be treated on the spot. If practicable, set up camp and change him into dry woollen clothing (don't completely undress him to do this). Put him in a sleeping bag with another group member; with two, If a double sleeping bag is available. Body temperature may continue to fall slowly for another hour or so after rewarming treatment has begun. Consequently, early recognition and immediate a



Deserts and rivers -

Visit the living desert of Rajasthan, a wilderness decorated by fantastic jewelled palaces, and by the proud Rajputs, the colourful men and women of the desert. Sail the Ganges for an extraordinary adventure on the most holy river on earth. Experience the irresistible magic of India.



Peregrine takes you to the essential India. Ring now for free colour brochure and details of our regular fre film nights.

Suite 710. 7th Fir. 343 Lt. Collins St.

Melbourne, Tel. (03) 60 1121, 60 1122.

PEREGRINE EXPEDITIONS

Bushwalkers Transport System

for South-west Tasmania, Scotts Peak, Cockle Creek, Mt Anne, the Franklin or Picton rivers and more.

Walkers or rafters.

Groups or individuals.

Rod Barwick, Bushwalkers Transport 186 Campbell Street, Hobart 7000 (002) 34 2226 all hours Shellite, metho available.

Tasmania. The Treasure Island.

If you want the best quality, service and advice on



berghaur



Tents Roots Rucksacks Sleeping bags **Outdoor clothing**



MEI

ALP SPORTS

vou will find it here

SCOUT OUTDOOR CENTRE QUEENSLAND



Shop location: 132 Wickham Street Fortitude Valley Brisbane Mail Orders to PO Box 50 Broadway Qld 4006 Phone (07) 52 4744



MOUNTAINCRAFT

SPRING/SUMMER COURSES

BASIC CLIMBING

Learn to climb properly on Mountaincraft's **Basic**Rockclimbing Course. No previous experience is necessary and men and women are welcome on the course. The course fee is all-inclusive and includes all instruction, climbing geal camp accommodation and food. The venue is Mount Arapite

8-15 September 15-22 Decembe 29 December -5 January 12-19 January

ADVANCED ROCK

If you have previous climbing experience or have completed our Basic Rockelimbing Course and you would really like to develop your climbing technique and radically advance your grades, then Mountaincraft's Advanced Rock Course is the sensible way to upgrade your climbing skills. The emphasis is on sustained big wall climbing (free and aid).

19-26 January and by arrangement **NEW ZEALAND MOUNTAINEERING**

Join us on a 15-day climbing trip to the top climbing areas of New Zealand's South Island wh Australian technical rock skills to mountaineering skills Barry Young, in conjunction with Alpine Guides Mt Cook March 1985

BUSH SURVIVAL

A new survival course which faces up to the challenge of teaching survival while meeting environmental responsibility.

The course will be taught by a team of leading survival. instructors including former staff of the army survival school a leading botanist and an expert on survival navigation. It teaches the student that survival is a state of mind induced by armony with the environment rather than by destroying it

26-31 January

ROPING, ABSEILING AND

5- and 7-day courses for bushwalkers, carryoners, di-cavers and persons interested in roping in its own right Commencing 26 September and 6 December

TEACHERS & YOUTH LEADERS RAPPELLING INSTRUCTORS COURSE

3-, 5- and 7-day roping and rappelling courses for teachers and youth leaders available in linked modules commencing

26 September and 6 December \$150-\$300 (Discounts for groups) Mountaincraft provides specialist climbing, abselling, Nordic skiing and survival instructors to schools and youth groups. We provide instruction from a single day for \$100 to complete outdoor education programmes for groups of 100. Private and group instruction by arrangement

We can also provide information and take bookings for Alpine Guides (Mt Cook), New Zealand and Wilderness Tours.



MOUNTAINCRAFT ::: Post Office Box 582, Camberwell, Victoria 3124 Phone (03) 80 3324 (03) 397 6529



only the best meats, vegetables, fruits and other ingredients are used in the preparation of Freeze Dri foods. The following meals are available:

*Lamb and Peas Beef and Beans

*Beef Curry and Rice *Savoury Mince and Rice *Beef Casserole

Sweet and Sour Lamb Smoked Fish and Parsley Sauce Savoury Spaghetti

Chilli Con Carne

Yoghurt - Fruit Salad *These lines are also available in 300 g (5 serving) packs

AVAILABLE FROM LEADING CAMPING AND OUTDOORS STORES

Marketed and Distributed by: Karrimor Australia Pty Ltd

148 Queen Street Alexandria NSW 2015 Phone (02) 698 3860 Richards McCallum Asia Ltd PO Box 14 Abbotsford Victoria 3067 Phone (03) 419 4211

Prime Beef Steak

Macaroni Cheese

Yoghurt - Natural

Yoghurt - Apricot

Yoghurt - Strawberry

Apples

Apricots

Potato Flakes

Manufactured by:



Alliance Freezing Company Telex No NZ 5325 PO Box 845 Inverceraill New Zealand

treatment are essential and treatment should be maintained until the victim is completely

If the victim has been in a state of near collapse he should not be moved for at least a day. Food and drink should not be given until the victim can take it for himself. Do not give alcohol, rub the body or apply localized external heat since this only sends cold blood from the extremities to the central core, which has its temperature further lowered

In severe cases where the victim has collapsed and breathing stops, mouth-to-mouth resuscitation should be applied. This should be continued until normal breathing resumes

In the case of cold water immersion, if the victim is young and fit, and the water is very cold, the chances of survival may be better than at first appeared if he was not breathing when pulled out of the water. A biological phenomenon, called the mammalian diving reflex, triggered by the shock of cold water. enables humans. like whales and seals, to live without breathing for longer than normal. When a person's face hits cold water, his heart rate goes down, his blood pressure goes down, the blood flow in the legs and arms decreases and is shunted to internal parts of the body. That slows the metabolic rate and reduces the need for oxygen

The lesson here is not to give up resuscitation attempts too soon. The chance of recovery, without brain damage, is greater than if the water had been warmer

Frostbite is another close relative of hypothermia. This is a localized injury, produced by cold, in which the affected tissues are frozen. The most commonly affected parts of the body are those which are usually exposed (nose, cheeks and ears) and those with the poorest blood supply (hands and feet).

When the body temperature drops below 35°C it is the skin surface and extremities which receive reduced blood flow as the body tries to retain normal temperature at its core. In this situation the extremities become colder, a condition that is aggravated by wet clothing. The skin and superficial tissues begin to freeze and with continued chilling more and more tissues freeze solid

Superficial frostbite only involves the skin or the tissue immediately beneath it. The skin appears pale, grevish-white, hard and frozen. Pain is usually felt early, but later subsides. The affected part feels intensely cold or numb. After rewarming, the area will be numb and mottled blue or purple: it will then swell, sting or burn for some time. In more severe cases blisters will form and pain may persist for several weeks. Eventually the skin will peel and remain red and abnormally sensitive to cold.

Deep frostbite is a much more serious injury. and usually associated with the more severe cases of hypothermia. The external appearance is the same as for superficial frostbite, but the freezing goes deeply into tissues (even to the bone). There is no pain in the area initially, but huge blisters and swelling develop later. Pain may be experienced for many weeks and permanent loss of some tissue is highly likely.

The basic treatment for hypothermia will also treat superficial frostbite, but in the case of deep frostbite, get the victim to medical aid urgently. Slow and inadequate rewarming in the field, particularly if refreezing follows, invariably leads to gangrene

Efforts to thaw deeply-injured parts should not be attempted until the victim has reached a place where his entire body can be kept warm during and after treatment, and from which he can be moved without having to use the injured extremity. You can walk on your frozen foot, but ADVANCED a goose down sleeping bag... ... at a duck down price!

Outside it's below zero — you snuggle into the warm luxury of prime Chinese Goose Down, draw the Down Collar Own Filed Collar over your shoulder

down-filled collar over your shoulder and laugh at the cold.



EFFICIENT BOXED FOOT DESIGN = WARM FEET

CONVENTIONAL FOOT DESIGN = COLD FEET

FABRIC: High count nylon taffeta which is down proof, breathable and has a silky soft finish. FILL: 800 g Goose down. Total Weight 1,700 g. LEFT AND RIGHT bags join to make a double.

Come in to either of our two shops WHILE STOCKS LAST. Don't live in Sydney?

No worries - Use our prompt MAIL ORDER SERVICE.

Mail Order

Shop Location

291 Sussex Street Sydney (02) 264 3146, 267 3639

PO Box 7O3

Crows Nest NSW 2065



INTERNATIONAL TRIPS JAPAN HOT SPRING SKIING untain lodges in Hokkaido, Japan's Superb skiing, scenery and culture. CYCLE JAPAN isurely cycling in the northern island of Hokkaido. 52 975 nd and people ess, whitewater and lake touring the heart of the Canadian Shir uring at its best. 22 days ROCKY MOUNTAINS BACKCOUNTRY SKIING Backcountry touring in Colorado and California nt skiing and scenery. 22 days ANNAPURNA Expeditions variations. EVEREST "OFF THE REATEN TRACK" KANGCHENJUNGA TREK GAURI SHANKAR WHITEWATER Trek in the remote Rolwaling area then raft out via the Tambo Kosi and Sun Kosi the Tambo Kosi and Sun Kosi. THE GENTLE HIMALAYA — RHODODENDRON TREK A relaxed tour around North India — Rajasthan and the Taj Mahal. Plus two weeks 57.863 TREKKING ON THE EDGE A spectacular trek near Everest Crossing high passes, and climbing a 6000 m peak. No climbing VALLEY OF THE FLOWERS A short trek to a high Himalayan valley, carpeted with flowers and surrounded by snowy peaks. Mrs — Jun 52,175

Many other Nepal, India, Japan and China trips also available

Address

AUSTRALIAN TRIPS GRADE SEASON COST Intensive rafting instruction, Upper Murray Rafting, from eary is 0ct — Murrumbidges Rafting, Nymboida Rafting, motivas, 2 — 6 2 — 6 days to \$355 Dct — Apr From \$150 2 — 6 days to \$395 Kayaking for beginners Mar From \$150 owy River Kayaking and Murrumbidgee kayaking. WALKING Budawang Traverse, Coastal Discovery, Kosciusko Wildflower Walk, Jagungal, Tasmanian Walks ol from The Great Lakes and from 2 - 5 days ROCKCLIMBING \$110 All year **Abseiling and Canyoning** Instructionals Wollangambe and Cloustral Dec — Max 1 — 2 days S120 On reque PRIVATE GUIDING OR INSTRUCTIONAL TRIPS For further information and brochures: Wilderness Expeditions, 26 Sharp Street, Cooma 2630 phone (0648) 21587. Wilderness Expeditions, GPC Box 1644, Sydney, 2000, phone (02) 2327400. Outdoor Travel Centre 377 Little Bourke St. Melbourne 3000 phone (03) 677252



New! Wild Binders

Protect your magazines in good-looking Wild binders. Emerald green with light green lettering, each one holds eight copies of Wild and costs 59,95 (including packaging and surface postage anywhere in the world). Use the Wild Order Form in this issue or send cheque/money order and details to Wild Publications Ptv Ltd., PO 80 x 415.

Prahran, Victoria 3181.



Getting wet and cold is part of bushwalking! (Crossing Breakfast Creek, Blue Mountains, New South Wales.) Dave Noble

not once it has been thawed.

Hypothermia is a very serious condition. A person may survive two to three weeks without food and three or more days without water, but a drop of 4°C in body core temperature may mean only two to three hours of life.

The chief hope for victims lies in their companions. Sometimes this could be a false hope as, when one person suffers, the chances are the others are on the verge of being affected also. However, the members of a fit, well equipped and well prepared group, each of whom is aware of the signs and freatment of hypothermia, are the ones least likely to succumb. •

Further reading

due 1985).

Survival by Lex Lannoy and Peter Nicholls (Horwitz Grahame, 1982, RRP \$9.95).

Stay Alive, Handbook on Survival by Maurice

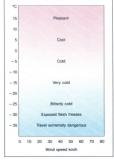
Stay Alive, Handbook on Survival by Maurice Dunlevy (Australian Government Publishing Service, third edition 1981, RRP paperback \$4.00, waterproof \$9.50. Add \$0.70 if ordering by mail).

Bushwalking and Mountaincraft Leadership Manual of the Victorian Bushwalking and Mountaincraft Training Advisory Board (Victorian Department of Youth, Sport and Recreation, second edition 1981, RRP \$3.00 . New edition

Death by Exposure is Not an Accident Brochure (Federation of Victorian Walking Clubs, GPO Box 815F, Melbourne, Victoria 3001. Quantities of less than ten are free).

Windchill

The chilling effect of wind on the body in dry conditions is dramatic. (It is even more pronounced in wet conditions,) The degree of windchill with increasing wind speed is found by following the descending line form a still air temperature. For instance, in an air temperature of 5°C and a 50 km/h wind, the temperature felt by a person's unprotected flesh is —10°C (a decrease of 15°C).





Ph (03) 523 5727.

Our travel packs are making people go wild.

At Nordic Ski & Backpacking we've seen people take off to all parts of the planet with nothing but one of our travel packs as their companion.



It's because our range of travel packs is probably unequalled by any other place in Melbourne.

From Lowe we have 3 packs the Travel Kinni I with a 50 litre capacity, the Travel Kinni II with a 60 litre capacity, the Travel Kinni III with a 70 litre capacity,

All Lowe packs feature the Paralux suspension system, tough coil aback panel which zips over the harness to protect it from rough handling.

From Berghaus we have 2 packs - the Mustang A50 of 50 litre capacity and the Mustang A65 of 65 litre capacity. They also feature the special back panel, compression straps, the AB carrying system, 12 oz. Cordura etc.



So whether Nepal or Naples is your destination, Nordic Ski & Backpacking may be the best place to start your trip.

Nordic Ski & Backpacking

Cnr. Murrumbeena & Neerim Roads, Murrumbeena. Ph: 5684133, 5698368.

THE OLYMPIA

after years of producing top quality craft in New Zealand, QUALITY KAYAKS has combined its extensive boat building experience with the very latest plastic technology to produce unbreakable rotationally moulded plastic kayaks.

The Olympia design is based on the Olymp 6, a kayak which has proven itself as a superb training craft, excelling in rough water. A low rear cockpit and raised front deck allows the Olympia to fold behind the seat under severe stress conditions and makes rolling easier.

Made of durable cross-linked polyethylene, this kayak is almost impervious to impact and handles the bumps of river running without the worry of wear to the boat. Cross-linked polyethlyene boats are light, rigid and will not distort with age.

Length 390 cm, width 60 cm, weight 16 to 19 kg, colours; white, blue, green, yellow, orange, red.

The Olympia was purchased by eight of the successful Australian Team at the

1984 Easter Championships in New Zealand.
The Scorpion slalom K1 and other QUALITY KAYAKS N Z products are imported by:

LEISURE COAST CANOE SERVICES

492 Princess Highway Woonona NSW 2517 Dealer enquiries welcome (042) 84 1616

Youngs Outdoor Gear



Equipment and advice for the Bushwalker, Rafter and Angler,

Things have changed! Our service is the same but our shop is four times bigger.

fibrepile clothing Softer, stronger, minimal piling.

35 Wilson Street Burnie Tasmania 7320 Ph (004) 31 6706 Bankcard welcome

TAX FREE

If you plan to go to China, Nepa India, Japan, Korea, and Taiwan, Who we plan to ston-over in **Hong Kong**

> MOUNTAIN SERVICES International Ltd. Rm. 102, 1st floor, 32 Morrison Hill Road, Wan Chai, Hong Kong. Tel. 5-733313. Telex: 65205 MTSEV HX Business hrs: weekdays 11.00 — 19.00.

Contributors

Gregg Borschmann learned to type when doing the shipping notices and auction results at The Age newspaper as a cadet journalist. He chased pop stars, politicians and only one fire engine, that he can remember, during eight vears working in Melbourne and Sydney for The Age then as a feature writer for The Daily Telegraph.

Two years ago he went looking for the great Australian legend, travelling the Australian bush as an independent journalist. He hasn't found Glen Nash is a professional guide who has worked for many of Australia's largest adventure travel companies. He is an active climber and ski mountaineer having led many trips in the Australian Alps and to the mountains of Europe and New Zealand. He is currently employed by Rockcraft Climbing School, Glen is also a keen mountain photographer and writer in his spare time

Bishop Ian Shevill was Bishop of North Queensland for 17 years. After this he was for four years Assistant Bishop of London and secretary of the oldest of the Anglican Missionary Societies (USPG), During this period he travelled extensively in Africa and the Far East. In 1973 he was posted to Newcastle, Australia. He has the unique achievement of



the legend yet, but there have been plenty of maddening and gladdening surprises. Most of this year has been spent researching and writing about Australia's wet tropical rainforests.

Cliff and Dawn Frith are zoologists now working as freelance photo-journalists in northern Queensland. Their outstanding wildlife photography has illustrated many books and magazines, both popular and specialist, in many languages



They now specialize in tropical Australia and accept assignments throughout the South Pacific. New Guinea and Indonesia

Their first book, Australian Tropical Rainforest Life, was published last year.

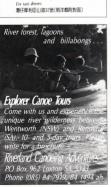


having supervised the completion of two Cathedrals (St James, Townsville and Christ Church, Newcastle), His experiences in north Queensland brought him into close contact with the problems of ecology

In 1977 he suffered a stroke and since that time has been writing weekly Christian articles for Brisbane's Sunday Mail. Amongst his books are Half Time, God's World in Prayer, One Man's Meditations and Going it With God.

Macgregor Stewart has an unlikely background for the manager of Mountain Designs' thriving Sydney shop. An Arts graduate who majored in philosophy at Queensland University, he then researched animal ecology for three years in Griffith, New South Wales, before joining Mountain Designs.

Macgregor's outdoor interests have included sailing (since he was three years old) and, more recently, bushwalking in Queensland's coastal regions, and some rockclimbing.





HISTORY IN THE M

Klaus Hueneke continues his history of the Snowy Mountains.

DEVELOPMENT AND CONSERVATION ARE
odd bedfellows, generally considered
incompatible and mutually exclusive, but
in the Snowy Mountains they have defied
history, joined forces and given birth to a
pair of magnificent twins, the Snowy
Mountains Scheme and a National Park
worthy of world status.

The great Australian catch-cry — 'irrigate the inland by damming and diverting' — finally took hold in the 1940s and in rapid succession led to the

declaration of Kosciusko National Park (1944), the building of Guthega Dam (early 1950s), the buildozing of the Alpine Way (1956), the cessation of grazing by sheep and cattle but not by wombats and wallabies (in 1958), and the creation of hundreds of kilometres of survey tracks and fire traits.

New roads, in combination with new European faces and refreshed aspirations, soon led to new beehives like Thredbo, Perisher, Guthega and Mt Selwyn, and to

new access heads for skinny-board skiers, sherpa-soled scrub bashers, bush cyclists and jodhpur-attired followers of the cult of the Man from Snowy River. Other forces such as increasing affluence, more time away from work and the dawning realization that the Australian bush is not so monotonous after all, soon added up to a helil of a boom in the numbers of rucksacks, light tents, slim skis, hardy boots, nylon jackets, sun hats, carvas water bags and meals of gluggy water bags and meals of gluggy sour



AKING

dehydrated stew.

Gone were the days of a rare ski descent into Little Austria or a quiet week enjoying the creature comforts set up by the Whites River Hut Club (including a larder of food, a radio link with the Chatel and Antarctic-style sleeping bags), and gone was the time when you could cance the Snowy without trace of human lootprint, tubbis or fireplace. From the 1960s on, except for out-of-the-way places like a seculed untracked valley, the

wilderness experience had to be shared.

Such sharing came as a surprise to oid skiers like Ted Winter, Elyne Mitchell, George Day and Ken Breakspear but was not new to the hundreds of Finns, Austrians, Norwegians, Germans, Italians, Poles and Yugoslaw who blasted the diverting tunnels and poured elegant concrete 'Christo-curtains' across numerous untouched valleys. Many of them 'made a packet,' were seduced by the magic of the mountains, tound a way of staying on and, in the case of Robbie Kliplinen, Kore Grunnsund and Otto Pinkas, set new endurance skiling records.

In the early 1960s the Kiandra-

52 minutes. Having broken the flying Finn's time as well as the eight-hour barrier (at least on foot) there will now, no doubt, be more skiers who will take up the challenge.

Paddy Pallin sold 43 pairs of fouring side in 1965 and was inspired to run the first Australian Cross Country Ski Classic. But not in the relatively safe corridor between Smiggin Holes and the Chalet — he opted for a much more intrepid and potentially dangerous route starting at Round Mountain. There were six starters, Charles Derrick (who later perished near Mt Hotham), Ross Martin who still holds the Kosciusko summit record, Bob Maddison and the old trio of Robbie, Otto and Kore.



Ted Winter (left) and friends sheltering under the 'Bottle Tree' on the Broadway Spur, early 1950s. Above, "living legend", Paddy Pallin. Winter collection and Husey International Page 1997.

Kosciusko crossing record still stood at 16 hours, the time set by Reg Gelling and George Aalberg way back in the mid-1930s. Kore and Otto took up the challenge first, and in quick succession reduced it to 11 hours? 22 minutes, ten hours 35 minutes and finally eight hours 40 minutes. On one of the first journeys they nearly perished in a foggy wooded valley off Mt Tabletop. Otto remembered stitting utterly exhausted against a tree trunk with a metal torch glued to his gloveless hand. Kore saved them by persevering with wet matches and wet snow gums to finally light a fire.

Conditions were much better in 1964 when Robbie Klipinen swept across in when Robbie Klipinen swept across in eight hours 11 minutes. He had beautiful weather, deep hardpacked snow, the right wax on a pair of light wooden racing skis, excellent knowledge of the terrain and, after weeks of training at Grey Mare Hut, a very finely-tuncy, almost lean, profile. No one has come near him on skis and only one person, Peter Treseder, has beaten his time on foot. In a magnificent solo marathon in Petruary this year, Peter ran from the Perisher car-park along the Great Divide to historic Klandra in seven hours.

In the seven and a half hours that it took them to reach Perisher, they experienced a big change in the weather (for the worse), the disappearance of Otto over a giant cornice, the withdrawal of Bob Maddison at Whites River because of cramps, a murderous crossing of the Rolling Grounds and a joint crossing of the finish line accompanied by the farlare of Sverre Kaaten — an experienced master of ceremonies.

Paddy, who was born in Durham, England, in 1900 (yes, he's almost 84 years old), didn't take up bushwalking on skis until the early 1950s and completed first Klandra to Kosciusko crossing in 1956. He has since skied it three more times, in 1965. 1972 and 1977. and walked it twice, in 1955 and 1977. The 1972 journey was to make the widely-shown film Kosciusko — the Cruel Country. His experience of the 1977 Commemorative Crossing (50 years after Schlink and Hughes) had a rather hilarious bucch:

There was a steep-sided little gully with open water, and as I skied along it the soft snow collapsed and in I went, face Irist, into a deep pool of water with my 30-pound pack resting on the back of my head. I struggled to get my face out of the water, but the soft snow offered no registance to my pushes and I

WILD OCT/NOV/DEC 1984 29



Above, Snowles wombat. Middle, training partners (see story) Ross Martin (left) and Robbie Kiloinen on Mt Jagungal in 1964. Right. Ted Winter in 1978. Hueneke and, middle, Kilpinen collection

remember thinking, "What a way to die!". I got my head clear, but anyone who has had a fall in soft deep snow will realize my troubles were not over. My wrists were through the leather thongs of my stocks, a pack weighing 30 pounds was fastened to my shoulders and my feet were secured firmly to six-foot skis. I somehow released my wrists, took off my pack and got into a sitting position to survey the situation. Was I actually sitting in water, or was it just cold snow I could feel? Whilst straining to reach my ski bindings to release my feet I broke wind - and had indisputable evidence that I was sitting in a pool of ice cold water. Then I saw the funny side and began to laugh."

The crossing from Kiandra to Kosciusko or vice versa is certainly a premier event for most bushwalkers and ski tourers. particularly because it is the only 100 kilometre journey in Australia that rarely descends below 1,600 metres (5,000 feet) But in a National park more than 200 kilometres long and up to 60 kilometres wide there are many other possibilities. One person who has explored more than the usual routes and who has written numerous articles on the early explorers is Alan Andrews.

In 1949 he made one of the first ski explorations of the frost plains north of Kiandra by skiing via Rules Point, Tom O'Rourkes Peak, Cave Creek, Pockets Hut, Mt Bimberi and Currango, and in 1952 he covered the country south of Dead Horse Gap as far as evocative places like Mt Leo, Adams Monument and Paddy Rushes Bogong. He has a passionate interest in the 'who climbed Kosciusko first? controversy and is convinced that it was Count Strzelecki in 1840, 'It was on Mt Abbott that he left McArthur and from there he proceeded on alone to ascend the summit and bestow upon it the name of the heroic patriot General Thaddeus Kosciuszko

Dr John Lhotsky, who some believe named Australia's highest point Mt King William the Fourth in 1834, only reached Mt Terrible, a few kilometres south of today's Thredbo. Andrews partly based this impression on a 1971 exploratory ski tour:

> 'The view from Mt Terrible is most commanding. Lhotsky's record of the scene from Mt William describes our picture - to the north-east the bendings of Napoleon Valley (the Mowamba), all to the west "immense accumulation of mountains". "SE side of the horizon. viz the opposite view, not so wild and a coast range (about Twofold Bay?) shutting up the horizon". To the south-west а "contiguous . somewhat higher' mountain . .

Recorded in the clumsy and now archaic style of the last century, there is little doubt that Lhotsky was facing the turret-bedecked bulk of the Rams Head Range

One much more adept at moulding the verbal vernacular is Ted Winter who, with 30 years of long-distance ski touring behind him, penned what has become a substantial contribution to our mountain poetry. Many of his tours started from the Khancoban side via Everards Spur and Pretty Plain, a route often used by stockmen like Ernie Boardman and Jack Armstrong and followed in 1935 by Tom Mitchell on the first ski tour to the Chalet Ted was particularly captivated by a large knobbly snow gum called the Bottle Tree: "See you tomorrow at the bottle-

tree". Ernie used to sav. As we set off from Swampy Creek for Everards' on the way, And we sheltered in its hollow against the stinging blast, And waited snug and cosy till the pack-horses came at last And dry it's kept the tucker which our rucksacks could not hold. - The stories wove around that tree will never all be told -And sometimes to its branches we

have lashed the skis To rest another summer a-sighing in the breeze. Perhaps Ted's best and most graphic

'On the way it growls and gurgles Over boulders worn and bared. Twists and turns, and boils and bubbles

Though its song is seldom heard Above rears its own bogong. Then it sweeps around its hut: Then north it tumbles, tumbles, As it cuts a deeper rut.

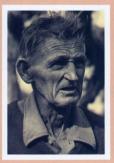
A road now skirts its valley. And a power-line as well And bridges span its rapids As its murmurings plainly tell. Perhaps first, there was the bogong, And then the namesake creek, Then the hut was built by stockmen As new pastures they did seek.

But why the name? Why "Dicky Cooper"?
Perhaps a famous man like Schiink?
Nol Just a lowly "abo", Whatever you might think, Long departed with his fellows From this range, which once they roamed.

an environment of sudden surprise and there are many stories of snowed-in cattle, frostbitten miners, disoriented bush-walkers, drowned fishermen, injured ice climbers and perished ski tourers. One of the most harrowing recorded tales is the death of Graeme Edenborough near the upside-down Cup on a Saucer in 1972. A companion recalled:

developed a special saw with a very stiff blade and large teeth like the snout of a sword fish. Others tried pruning saws, machetes, the ends of skis (not recommended), collapsible army spades, billy lids and, if all else failed, bare hands. The Kosciusko Huts Association even introduced a competition for the best idloo.

Some of the ingredients for a successful igloo include a good supply of packed but not loy snow, an internal floor higher than the roof of the entrance tunnel, a smooth Gothic arch and a well-packed inside surface. Inside it is incredibly snug, silent and snow proof, and a single candle will bounce light off a thousand liny



reflectors. When bedded in superdown on a ground sheet and two layers of closed cell foam it could almost be called luxurious. That is until it starts to rain or blow a warm westerly.

One man who didn't need an igloo, a snow saw or, for that matter, a pair of 'poof boots' (bivvy socks) was Geoff Mosley, the current Director of the Australian Conservation Foundation. He came to traverse the high country in summer, attraverse he did, in a 19-day marathon that started on the outskirts of Canberra on 14 November 1972 and ended below Mt Skene in Victoria about 470 kilometres a later. He and his part-lime companions walked for ten to 12 hours a day at an average of 25 kilometres a day at

This trip, partly done for the joy and the challenge and partly to advertise the embryonic Tri-State Trail, now stands out as a landmark in the history of long distance tiger walks. As Geoff relates, it was not without drama:

"I had suffered some stomach discomfort back at Glen Vallely but as the day wore on things became much worse; the strength went from my legs and by the time I reached the Cope Saddle I was too weak even to put up the tent.

In between violent bouts of vomiting and diarrhoea, which were



To our shame, they've dwindled dwindled,

And not Nature may be blamed.

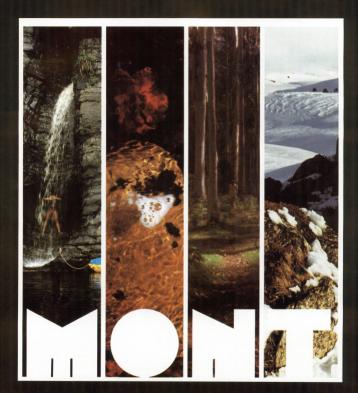
Years — too brief to count in hundreds —

Have changed this mighty land. We've tamed its snow-fed rivers To transform its desert sand. But the mark on our escutcheon Which we find hard to explain Is the passing of the "abo":

And my heart is sore with pain.' The high country is a quixotic place full of irony and paradox; while at one moment you can be as safe as a pigmy possum, the next you can be as exposed as the top station of the Crackenback chair lift. It is 'It was dark when Graeme starred moving. He was punching me and moving his legs as if skiing, He model and cried "Help!", and "Greg" while I pleaded with him to stop moving, conserve heat, answer me sensibly. He gave a final moan and was still. I was stunned. The ice cave was too low for resuscitation.'

Events like this, and the growing problem of overcrowding at huts like Albina, Whites River and Mawsons, prompted skiers to experiment with building igloos and snow caves — for a few years one could almost tour from one icy tomb to another, at least on parts of the Main Range. A key exponent of snow manipulation was Pieter Arriens who

Designed for the Wilds



Manufacturers of Snow and Bush Equipment

MONT Suppliers: SYDNEY: Caving Equipment, Mountain Equipment, Eastwood Camping Centre CANBERRA: Paddy Pallin MELBOURNE: Bush and Mountain Sports, Eastern Mountain Centre HOBART: Jolly Swagman, Outdoor Equipment MONT
P.O. BOX 1059,
Canberra City,
A.C.T. 2601,
Australia



so bad at one stage that I felt as so bad at one stage that I felt as though I was dying, my thoughs began to turn to how I could get back to civilization. I knew that pack to civilization. I knew that on a road from which I might be able to obtain a lift. Although I was very keen at least to walk to MH others, which was the walk to MH other and the decided that I'm y health did not improve and I met a car I would finish the trio there and then

The next day I was still sick and unable to eat, but I found that I could get up even the steepest hills if I walked for ten minutes and then rested for ten. After a while I settled down to this routine and in spite of my weakness began to enjoy the sensation of added risk which all solo walkers fee!"

1972 is barely 12 years ago, less than the age of my oldest daughter, yet long nenugh to see enormous changes in the high country, changes not only in equipment and style but also in attitude, perception and management. Some things, like the Telemark revival, have come full circle and other things, like the Mountain Mule pack carried by Geoff Mostev have come to a full store one to a full store one to a full store to a full store.

The pack of today is aero-dynamic, body-clinging, comfortable and in colour almost punk; skis are light, narrow, waxless and fast; tents are storm-proof, rip-proof, mosquito-proof and fool-proof! Gore-Tex is in and oiled japara is out; carbon rods are the rage and aluminium



0 10 20 30km

is old hat; snow grass is out and selfinflating mattresses are in — where will it end?

The same goes for attitudes. An open fire, once the key mesmerizing ingredient for a night in the bush, is frowned upon and carrying your own high technology chooler and expensive imported fuel is not. Camping around the glacial lakes is out, but replacing high elevation walking tracks with suspended steel mesh.

THE BRUMBY

 THE HIGH PLAINS OF SOUTHERN AUSTRALIA HAVE always conjured up phantoms in the moonless shadows of the snow gums: outside the comforting circle of the camp fire's warmth a vivid

inagination often transgresses all reason. A party had priched tents at a narrowing of the plain close to the source of the Ingegoodbee, but it was not long before convertation was purchased by ratting snorts, Initially demissed apparent be coming steadily observed apparent of be coming steadily observed and processed and stead of the processes of the processes

One valler professed to know horses well, but and no experience of brumbles. Certainly he had not experience of brumbles. Certainly he had yarns to tell, such as of the racehorse that had salkans a strapper in its etent like a dog shakes a rait. The smaller members of the parry shuffled noticeably closer to the file. Another tale involved a Cydedadle that was reduced to sausage meat by a brumby, and yet another concerned a wild sallice that balled up two women riders, killing the mare of the control of one and servicing the mare of the

'What ya reckon we ought to do?'
'It's nothing to worry about.' But the reply rang
hollow with the bravado of attempted self-

assurance. Strange, but any visitor to a haunted hut can Strange, but any visitor to a haunted hut can verify how a seemingly tranquil night can offer a cacophony of not inconsequential sounds. It agetting late. Vapour was rising from the narrow stream as the mists thickned. Was that movement there, beside the granite tors? Or there, just near the dead tree?

These experienced walkers reviewed their situation. Less than 400 metres away, but out of sight, was the hut where Charlie Carter had died. The tents in daylight had occupied the most lawn like patch of the plain - and the narrowest. But close to them were all those hoof prints, not just leading to the water, but out the other side. There wo pads, one now completely blocked by a tent, the other with a guy rope across it. And all those mountains of horse manure directly behind the fire - monuments to a stallion's territoriality The predicament suddenly became very bleak The campsite could not have been better chosen by a military strategist. They were merely horses - but why weren't they timid like brumbies were meant to be? Elyne Mitchell hadn't mentioned anything like this

The snorting came steadily closer, increasingly nervous? Desperate? Did the campsite occupy the plain's sole watering place?

A neigh from the opposite direction, followed immediately by wild galloping through the

darkness, vaporized the punctured confidence of our camp-fire horseman. 'Come on, We're going to the hut, There's no

knowing what he'll do next."
'And the Nipper?'

'No. He's staying in his tent.'
'Hell! I don't want to be left here. But I can't

leave me mate alone either. I'm staying. The other three grabbed sleeping bags and headed for the hut which, not five hours earlier, had been 'tai fleetsd,' dirtyl, and 'a lousy place to spend the night. They departed with a degree of composure. Midway to the hut he grongs of torch-light criss-crossed more and more to composure. Midway to the five the grongs of torch-light criss-crossed more and more composure. When the grongs of torch-light criss-crossed more and more than the composure of the ground the groun

There were two of them!

Back at the tents there was concerned

"Do you reckon we ought to go?"
"You ever heard of horses hurting anyone?"
"No." But there was not much confidence in the

Two hours earlier the images had been conjured in jocular bravado. But now, alone in their tents... (At least they won't need garbage bags for our bodies; they can use the tents we're trampled in). Sleep offered the possibility of an easy death, they rushed into the protection of corrections the protection of corrections the protection of corrections.

Al five o'clock it was not yet quite light. The mists were still there So, too, was a black stallion with a white flash, not 50 metres from the tents, the snifted anxiously, bawed the ground. He approached Behind him, and beyond the skeleton of the dead tree, seven mares filed off down the plain through the mist. The stallion turned and

off all the mornings of that walk, those in the full chose this one to sleep in — by two hours. They returned to the campoite, spirits rising about as fast as the sun. Vioces lost their unaccustomed high pitch, gained depth. Conversation was resumed with gusto. What had appeared, the night before, to be an ignorminious retreat was halled by some) as an act of valour. 'If only Napoleon had had the courage to retreat from Moscow.

Camp was broken and the trip continued. A Park ranger later offered an end to the tale. Our Prosremar casually mentioned: 'Yeah, we were up near the Tin Mines. Had a bit of trouble with a stallion up there. Seems we were on his turf and, hem, he got a bit excited.'

'Yes, we know him. He's been around for quite a while.'

The ranger grinned, inscrutably. He knew more tales but wasn't going to tell.

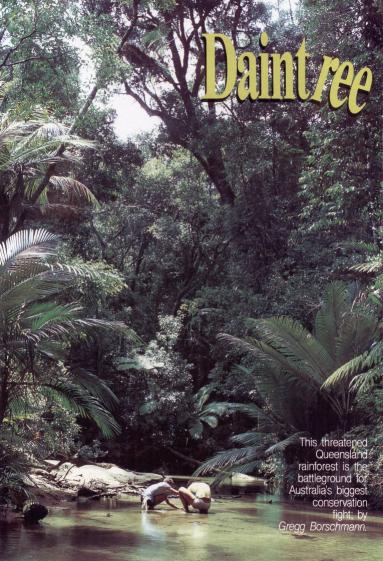
"The Pope"

e a day), today's outfits are by comparison super-efficient, super-advertised, superexpensive and super-computer-controlled. d In short, what was once a bonus for an extra pint at the old Jindabyne Pub is now a viable way of life.

In the process of this recreation revolution, several hundred more mortals have been inspired to extend their bodies, the been inspired to extend their bodies, the process of the process

chemically-treated logs and concrete drainage aprons is in. And not to forget the huts, those poor misaligned and much abused shelters, so doted on by some and so vehemently vanquished by others. Thank God, a latent appre

Last but not least in this history of change is the growth in commercially-guided ski tours, bushwalks, horse rides, rafting trips, fishing jaunts, rock climbs and snow-shoe expeditions. Preceded in the 1920s and 1930s by little more than a mounted stockman guide, a pack-horse or two and a few paying guests (at one pound



● IN THE LATE 1950s, DR LEN WEBB AND Geoff Tracey crossed the Daintree River by barge to take their first close look at the rainforests further north

They were travelling with Lindsay Smith, senior botanist from the Queensland Hetbarium. Since the early 1956 Webb And Tiacey had been engaged in what was the first attempt to ecologically study and classify the Australian rainforests. It was no easy task. For example, by 1975 when humid tropical region between Cooktown and Ingham, they identified it distinct rainforest types and a further six subtypes.

Previous work on these forests had been largely directed toward and dictated by the needs of the timber industry. Webb and Tracey, rather than looking at individual trees, how they grew in isolation or in a plantation, tried to understand them within the structure of the whole forest.

In 1962 they returned for their second trip north of the Daintree, this time camping for a couple of days in the Hutchinson Creek area, about 14 kilometres south of Cape fribulation. They did some exploring, and marked out an experimental plot, or study slie, on which they recorded tree species type and distribution. Geolf Tracey remembers: Every second plant we came across in there that first time was an undescribed species.

In 1970 they camped at Noah Creek, set up more study plots, and found still more rare, primitive plants, many of them endemic (found only in this region).

Now acknowledged as one of the most important botanical sites in Australia, Noah Creek is an example of how little we know about the complex worlds here. Geoff Tracey: "We know it's different but we don't know why. Hardly any work has been done there."

Incredible as it may now seem, if you stand in the middle of Sturts Storry Desert in the far south-west of Queensland, most solentists agree that this continent solally covered by rainforest some time in the past 65 to 15 million years. But temperature and rainfall have since fluctuated, aridity has become more widespread, and more recently there has been the rigour of the loe Ages. All this vastly reduced, or 'telescoped' as Dr Webb puts it, the places where the remnants of our ancient flora survive.

These rare relic plants — direct descendants of the first flowering plants currently dated as first appearing in Africa 127 million years ago — are now important clues to unraveiling, to understanding, the volution of the earth's andiosperm flora.

In a summary of the scientific values of the rainforests found in the Greater Daintree, produced last May for the Douglas Shire Council, Dr Webb wrote that the region 'provides one of the most compact and diverse assemblages of families of primitive flowering plants, and

Creek in Daintree rainforest near Mt Lewis and, above Cape Tribulation. Andrew Dennis and Steve Parish associated biota, to be found anywhere in the world ... The area is of crucial significance (providing) residues of the primitive stocks from which the bulk of the modern Australian flora has evolved. The area harbours some of the most ancient Australians that survive in the plant and animal kingdoms, and is therefore of profound interest in us all!

Tragically, others with different interests in this land were not far behind Webb and Tracey. During the 1960s, much of the lowland country between the Daintree River and Cape Tribulation was converted from vacant Crown Land, leased to cattle graziers and cleared

'morning noon and night, day after day after day after day, 'the Daintree wilderness) should be there for all north Queenslanders, it should be there for people all around Australia, it should be there for everybody around the world. It should be there for everybody around the world. It should be there for the inhabitants of that wilderness, our fellow creatures on this planet who don't have a vote. ... If we don't have he humility to consider our fellow creatures in nature, be they trees, be they living in the trees, or on the forest floor, there is no hope for us as part of the realm of nature on this balanet.' Dr. Brown said

North of Cape Tribulation, the road being bulldozed north by the Douglas Shire



By the time the cattle business went bust in the early 1970s, certain businessmen were ready with cheque books to buy rural land at bargain-basement prices. Several thousand hectares of that land — including large chunks of the rarest rainforest type in the valustalian wet tropics — has been, and as one hectare.

I remember driving through some of this forest, the road an engineer's dream, blasted straight and wide. The mystery of the forest, its soul, had been battered. Dr Bob Brown, Tasmanian MLA and the man most identified in the fight to save the Franklin River, sat in the driver's seat, thinking about that forest. "How much are these blocks?" he asked. "Starting price \$20,000, or \$65 a week on "special evendor finance". "There was a moment's silence as he mused on the tangle of life.

'Gee, I wish I was a millionaire.' He would, of course, buy this forest, every last block, not for himself, to possess, but to save, to preserve intact for all to own and cherish.

In a world losing tropical wilderness at the rate of 30 hectares every minute

Council has grabbed the headlines. The council talks of a four-wheel-drive track. Others fear perhaps one day a new coastal highway. In the wet season when four metres or more of rain can fall around Cape Tribulation, even a four-wheel-drive tractor wouldn't make it through some of the streams, and us some of the streams, and us some of the streams.

Paul Mason, whose family moved to Cape Tribulation in 1934 to farm bananas, pineapples, tomatoes and later cleared the forest for timber and cattle grazing, remembers travelling that track when it was first blazed in 1968 by focal real estate and sugar interests. Travelling in his Land Rover, he says it was a "a hir-riasing ride. I remember on Point Donovan, sitting four people on the bonnet to get some traction on the front wheels because the thing was so steep?

Wet season washaways and regrowth meant that before last December, when the bulldozers moved in again, bushwalkers were the only traffic.

This road has been a talked-about trail to a supposedly new El Dorado for decades. It apparently never occurred to the pioneer spirits in the 'deep north' that they could be destroying that El Dorado.

Patches of God-Light

• THE FOLLY OUR DESCENDANTS ARE LEAST LIKELY to forgive, say the scientists, is the loss of genetic and species diversity by the extinction of natural habitats. At stake is not simply deterioration, but the destruction of whole segments of God's creation. In two areas in particular — the extinction of species and the dismemberment of

the wilderness — this damage can be irreversible. The beauty of nature is a window through which the world sees the splendours of divine creation. In the Japanese resiglion of Shinto there are no delities — only phenomena which evoke in mains's soul a feeling of reverence. A waterfall, Mt Fulyama, a syawning chaem are regarded as Kami Fulyama, a syawning chaem are regarded as Kami advantion — the picturing of nor of God's splendours which lift maris soul from the mundrate of the magnificent. As Ruskin one pointed out, we have no right to deprive generations yet urborn of benefits it was not up over to bequeath — in other words we have no right, through our resignance, to optive our descendants of the joys rendered and the profit of th

Biblica passages illustrate with startling claim, in Job and the Paismis that the earth's creatures owe their existence to God, they know the creator. Oreflect his glory and subsist for his benefit, apart from any value they represent to humans. God in un cares for his creation with a concern that is a unual result or his concern that is an imals reveals that it extends to each distinctive thread of tapestry. Beests and all cattle, creeping things and flying birds, in the words of the prealmist, are spiritual as well as ecological.

resources.

Norman Myers, author of The Sinking Ark, estimates that with the growth of technology between the years 1600 and 1900, an average of one species of birds or mammals disappeared every four years, compared with one every 1,000 years during earlier periods.

By the beginning of the twentieth century, human-induced extinctions had increased to one species every year. The final quarter of the century, says Myers, may usher in a biological debacle greater than all mass extinctions of the geological past put together.

Wilderness is being lost at a similar pace.

During the 1930s Robert Marshall, founder of the
Wilderness Society, said that wild country was

disappearing like a snow peak melting in the hot sun. If only as refuges for endangered species, our remaining islands of wilderness could be defended theologically. A more compelling reason lies in their value as faith-nurturing resources.

lies in their value as faith-industring resources. Throughout history, for the arcitist, for the disease and Old Testament projects, for the disease this visitors and definited pride. In the clear, spare, lonely places contemporary solourners continue to sense their limitations and dependence upon God. Wild country is not sacrosanct and not every hectare needs protection, but when so little wilderness remains to a nation, the contemplative gifts of offers, such as silence, solitude and a sense gifts of offers, such as silence, solitude and a sense figit is offers, such as silence, solitude and a sense figure.

We, we'there succlusines of stillness to which we can willnam to got our spiritule bearings. The desert and mountains remain for us as they were for Jesus, settings for silence and prayer. So far the Church has not sufficiently grasped the nature of the present ecological crisis, it has not understood how powerfully dehumanizing is many awardon exploitation of his natural environment, nor water or exploitation of his natural environment, and understood how powerfully dehumanizing is many concerned to the control of his natural environment, nor corroding and spirit.

David Day, a Canadian author of a book on extinct species, recalls that what affected him most protoundly while doing his research was viewing actual relics of living creatures which once inhabited the earth, the auroch's horn, the pill of the Ball liger and the weathered his cage of a Stellars sea cox. Suddenly, he writes, he was

drawn into the reality of their venished existence. In his letter to the Romans, Paul vorde, "Sever since the creation of the world his invisible nature, namely his external power and delty has been clearly perceived in the things he has made." The Church seen nature as a window to God, but all parts of creation can provide, as CS Levie once worde, "patches of God-light" in the woods of our experience, glimmerings of divine handwork that help us to gather our sporting.

Wilderness and the spectrum of species, no less than other facets of nature, point us in the direction of the creator. Rather heedlessly we are extinguishing those patches of God-light for those who will come after us. •

Bishon Ian Shevill

Times have changed. The pioneering days should really be banished forever.

As the Australian Conservation Foundation so clearly put it in June 1981, when presenting the Greater Daintree National Park proposal to the Queensland Premier, Sir Joh Bjelke-Petersen:

Other parts of the northern anintrest region have had enough lowlands cleared for cane, swamps filled, hillsides stripped of their forest, glant old trees logged or burned and rivers and off-shore waters silled ... in a period where the "pioneer" approach is no longer necessary ... it is surely appropriate that the last, least disturbed natural corner of Australia's biologically rich wet tropics should be protected.

Just how biologically rich we are only now beginning to discover. Up to 150 tree species can be found on a couple of hectares — more than the entire tree flora of either Europe or North America. Eleven species of frogs and 19 species of reptiles have been identified in the Greater

Daintree. At least seven species of vertebrate animal are endemic.— four new species of frogs, the Thornton Peak melomys, the Bennetts tree-kangaroos and an undescribed species of skink (Sphenomorphus sp). Eight species of freshwater tish have been found in the one waterhole of a rainforest stream.

According to George Heinsohn from James Cook University's Zoology Department and Peter Valentine from the Geography Department: The majority of rainforest animals species, for example most insects, worms and other invertebrates, haven't even yet been described and, except in the most general terms, their ways of life and their functions in the rainforest community are unknown.

Dr Len Webb, formerly the senior principal research scientist in the CSIRO's Rainforest Ecology section (which has been disbanded since Dr Webb's departure a few years ago) says: Systematic studies of the (Greater Daintree) have begun only over the past ten years. More intensive collecting expeditions on a small scale (botany.

zoology, entomology, genetic, archaeology etc) have only begun over the past few years. Consequently the biotic communities remain terra incognita for science, emphasizing the need for "conservation of the unknown":

How, for example, was anyone to know in the 1960s the promised coastal road would pass through, just north of Cape Tribulation, the very heart of one of the last remaining patches of our lushest, most complex, rare and endangered rainforest type — that found on the humid tropical lowlands. It is now estimated that no more than a couple of thousand hectares of this forest remains. What excuse do we have, then, to shree out 55 hectares for a road reserve when we now know how rare this forest is?

What excuse does the Queensland Premier, Sir Joh Bjelke-Petersen, give for allowing this intrusion?

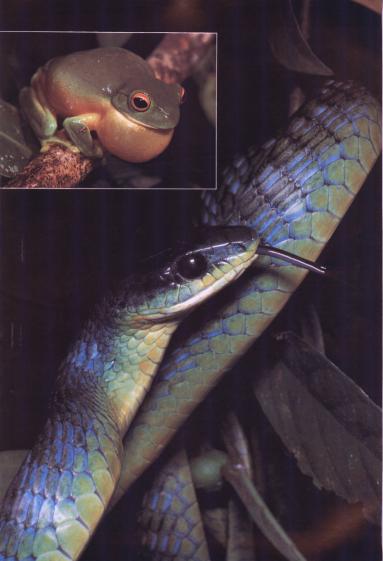
After all, at the Second World Widdeness Congress held in Cairns in 1980, he promised, after what conservationists saw as six years of dallying, that the Cape Tribulation National Park would be created. He told his audience: The area provides a living museum of plant and animal species in what is one of the few remaining examples of undisturbed coastal rainforest in the world?

Even more spectacular — unique within Australia and occurring rarely elsewhere — abutting this undisturbed coastal rainforest is, according to Dr John Veron, a principal research scientist at the Australian Institute of Marine Science in



Townsville, the largest set of fringing reefs on the eastern Australian seaboard. These reefs run between Snapper Island, just off the mouth of the Daintree River, north towards the Bloomfield River.

According to Dr Veron, one of the foremost authorities on corals in the Pacific Basin region: 'It is strange, extremely unexpected to have these two Daintree denizons: green tree snake and, inset, glant tree frog. Dennis, Cilff and Dawn Frith



complex ecosystems existing side by side because normally the conditions required for the rainforest preclude fringing ref — that is what makes this Daintree coast such a special place. (He can only think of two other places where tropical rainforest meets reef — on the Mergui archipelago of western Thailand and off the north coast of Papua New Guinea).

Put simply, rainforests need fresh water. Plenty of it. Corals will die if they get too much. Richard Kenchington, Executive Officer (Planning) with the Great Barrier Reef Marine Park Authority, says the fringing reefs have probably been able to develon here because the coastal rance University, walked over them once at low tide in 1975. Richard Kenchington looks like he may be the most familiar. But he has dived only twice for about an hour apiece off Noah Creek (on two other occasions the predominant south-easterlies made the water murky, preventing coral viewing).

The Douglas Shire is seriously proposing to build a road (estimated by the Council to cost up to \$2 million) through an area which Dr Geoff Mosley, the Director of the Australian Conservation Foundation, has described as the most important conservation site in Australia. At the same time, the Queensland National

placed on the Register of the Australian National Estate

Frank Crome, who was engaged as a consultant by the Australian Heritage Commission to assess the area, said in his report: 'Its scientific, faunal, floristic and scenic value make it one of the great natural areas in our country...the current world concern about the remaining forested areas of the globe make the area of world significance.

...still relatively untouched...its integrity is high and this is an important component of its national and international significance.

Realizing the inadequate nature of the 17,100 hectare Cape Tribulation National Park when it was finally declared seven years after Stanton's report (with some of Stanton's other Park proposals ignored), the Australian Conservation Foundation wrote to the Queensland Premier on 30 June 1981, forwarding the proposal for the Great Northern (now Greater Daintree) National Park. The boundaries approximated the area already registered on the National Estate.

The Greater Daintree is now the focus of the campaign to save all the wet tropical forests found between Cookfown and Townsville. In 1982 these rainforests were identified by the international Union for the Conservation of Nature and Natural Resources as one of the world's greatest natural sites. The IUCNNR, which advises UNESCO on natural sites of World Heritage quality, placed the forests on its indicative list of World Heritage sites.

The Australian Heritage Commission and the Federal Government are considering a report commissioned from the Rainforest Conservation Society of Queensland on the World Heritage qualities of these forests.

Grig Adermann, Press Secretary to the Grig Adermann, Press Secretary to the sevensiand kilmater or burism, National sevensiand kilmater or burism, National when asked about the Outselfaind Government's attitude to the Greater Daintree National Park proposal replied: "The problem with having these huge National Parks is management. You can only do so much with limited budgets and resources. On Cape York as elsewhere, one thing we are trying to avoid is having these large unmanaged Parks."

It is a far cry from 1977 when the Bjeller-Petersen Government promised to create a Cape York Peninsula Wilderness. The plan was to declare the entire peninsula, north from a line between Normanton in the Gulf Country and Cairns on the east coast, as a protected wilderness and wildlide rare. The Bitisbane Courier-Mail of 15 August 1977 quoted the Premier: This proposal may take several lifetimes to complete. But the Queensland Government is starting now for future generations to see part of Australia in an untouched state.

That promise has been either forgotten or abandoned. What better place to start, after all, than the Greater Daintree, our threatened 'crowning tropical jewel'? ●



The proposed Bloomfield-Cape Tribulation Road will not be easy on the family sedant Lloyd Harrington is so close to the Coral Sea, resulting in a very short catchment area for the streams. In some places, waterfalls almost tumble into the ocean. These very same mountains have guaranteed this area its high rainfall — and protected in the refuge areas, or survival niches, the primitive angiosperms — Dr Webb calls them

'green dinosaurs'. Dr Veron has found fringing reefs elsewhere to be amongst the most species-diverse of all coral reefs. He also describes fringing reefs generally as 'specialized ecosystems hanging on by their toes... If you muck around with the water flows and sediments you are going to whee them out fairly easily.'

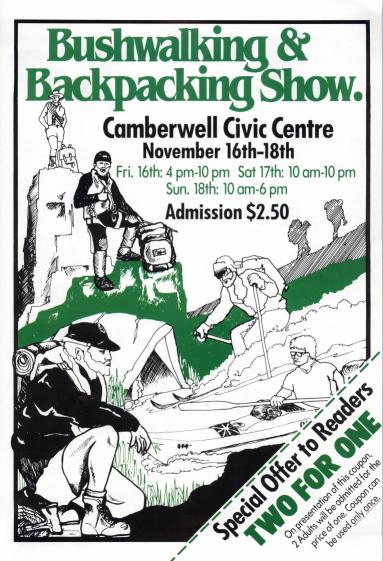
Despite this wonder, this spectacle our rarest coral reefs sitting alongside our rarest rainforests — despite presumed fragility and the possibility of outstanding species diversity, as far as I can determine, these reefs have not been seriously studied recently by any marine scientists.

Professor David Copley, Associate Professor in Geography at James Cook Parks and Wildlife Service, which is supposed to be looking after the area, cannot afford to appoint a full-time on-site ranger, or find the resources to produce and successfully implement a management plan for the Park!

In 1974, Peter Stanton, a biologist in what was then the National Parks branch of the Queensland Forestry Department, collaborated with other service officers to produce a report on the Greater Daintree (he called it then the Daintree-Cooktown region). Recommending at least five National Parks be created in the area, he wrote in his report: 'Nature has created a region superlatively rich in scenery and wildlife in a State where such regions are small and few. Apart from the Great Barrier Reef, it is the crowning jewel of all our natural wonders'.

In June 1980, the Second World Wilderness Congress recommended Greater Daintree not only for National Park status, but also for nomination to the United Nations Educational Scientific and Cultural Organization's Man and the Biosphere programme.

In October of the same year, the 350,000 hectare Greater Daintree was



GORE-TEX FABRIC DOWN UNDER

GORE-TEX® A Brief History

GORE-TEX® Fabric was introduced in the northern hemisphere in 1976 through qualified manufacturers of garments, tents and sleeping bags. Developed through advanced technology, GORE-TEX® Fabric is still the most breathable, completely water-proof and wind-proof fabric in existence.

By late 1978, through the combined efforts of manufacturers and consumers plus extensive research and development, GORE-TEX® Fabric was modified substantially to become an "easy care" product. Care and washing instructions were simplified dramatically.

1980 saw a further advance with a breakthrough in seam sealing technology. The GORE Seam Sealing Machine allows seams to be permanently and effectively sealed at the time the product is manufactured.

Progress has continued and new laminating techniques now permit GORE-TEX® Fabric to be used in a variety of new applications including running shoes, hiking boots, fashion footwear. X-C ski boots and ski gloves.

GORE-TEX® Fabric is simply the most functional fabric on the market at this time for all-weather protection and comfort.

GORE-TEX® Fabrics by Alp Sports and Wilderness Products Many other progressive manufacturers of quality gear and garments for outdoor pursuits now incorporate GORE-TEX® Fabric in their ranges as the premium performance product

Some of these Australian and New Zealand products made in GORE-TEX® Fabrics are illustrated and reader enquiries directed to the manufacturers will be welcomed and given prompt attention.

What is GORE-TEX® Fabric?

It is a combination of the unique GORE-TEX® membrane and woven and knit outerwear fabrics. While the shell and liner fabrics provide strength and durability, the key to performance is the GORF-TEX® membrane which is microporous, vet hydrophobic (water-proof). The result of this combination is water-proof, wind-proof, and durable garments which are comfortable to wear because moisture inside is allowed to evaporate and escape.

Gore-Tex







App Sports Let PD Bey SSS Ophischemic New Zealand 67 r46 Brothl Sportsgare PP LEE (MD) 455 Wester Street Ullion 1692 A007 (DD) 211 142 James New Mark Asserbale PT yet Let (MD) 475 Wester Street Ullion 1692 A007 (DD) 211 142 James New Zealand Sportsgare PS De 424 Glossparen 1809 x260 (DD) 275 275 271 Clarest Broth Let (DB Sports) 495 200 (DD) 275 275 271 Clarest Broth Let (DB Sports) 495 200 (DD) 275 275 (Mountain Bessigner FP LEF (DB Sports) 495 200 (DD) 275 275 (Mountain Bessigner FP LEF (DB Sports) 495 200 (DD) 275 275 (MOUNTAIN BROTH ADD 277 BROTH ADD 2

Trade enquiries: WL Gore & Associates (Australia) Pty Ltd PO Box 707 Brookvale NSW 2100 Telex 73355 Answerback code 0ZGORE Telephone (02) 938 5755



Cliff and Dawn Frith

Purple-crowned pigeon with young and, right, tawny frogmouth. All photos are taken in Queensland.





Masked plover at the nest and, right, no, not a Wild staff meeting, but palm cockatoos.





Ski



New ways to ski steeper and faster slopes, with Glen Nash.

● IN EUROPE WHEN SKIERS TALK OF ski touring, cross country skiing is usually the last thing they have on their minds. To Europeans, ski touring is a world of downhill-type skis, plastic boots, skins and avalanche beepers.

It's a somewhat different situation in Australia where heavyweight, wide, metal-edged Nordic touring skis and heavy Vibram-soled touring skis and heavy Vibram-soled touring boots are all the rage. Add to these skis and boots the almost compulsory heel locators, and the new skinny skins, and you have what closely resembles the same rig as that used by European Alpine ski tourers.

The heavyweight Nordic/mountain ouring ski has been quite popular for several seasons and there are many hard-core devotees who swear by this scaled dightweight mountain touring gear. The main argument in favour of this equipment is that it is much lighter and simpler than the European Alpine touring equipment, and given our more gentile terrain, Nordic gear is far more suitable than its Alpine brother.

This argument may be true to a cortain extent, but after the addition of all the extra weight necessary to 'soup up' the old langlauf ski and turn it into a steep ski, one still has loose heels and minimal safety. If you add a large pack it doesn't matter how 'hot' you are — you will still be straining to crank turns and get down the fall line in one piece. Stile? No such thind!

While cross country skis will always be ideal for turning over long distances in our Australian Alps, the Alpine touring ski also has a place in our mountains. When the Nordic skier reaches his limits, and by limits! mean steep, deep and physical, this is where the Alpine skier takes off. The Alpine touring ski is ideal for skiing the steep guillies, headwalls and cornicals ski spring corn plus Alpine touring skis equals heaven!

Alpine touring skis, bindings and boots, Glen Nash on New Zealand's Tasman Glacier. Photos lash collection because of their downhill ski development background, are far more complex in their construction and design than their Nordic cousins, so a brief run-down is in order.

SMIs. Apine touring skis are generally used in much shorter lengths than Nordec SMIs. Apine touring skis are generally used in much shorter lengths than Nordec SMIs. Apine touring skis and result of the small results of

Specialist Alpine touring skis also feature tip holes which enable a pair of skis to be lashed together to form a rescue slice in an emergency, and tail notches to facilitate easy fitting of climbing skins. A lot of Alpine touring skis also have brightly coloured decks and bases which could be a life saver in many mountain situations such as waterables and whiteouts.

The hard and fast rules for selecting the correct length of Nordic skis do not apply to Alpine touring skis. The only way for you to Alpine touring skis. The only way for you dimensions and carabilities is to go out and experiment with them. Nearly all ski manufacturers have an Alpine touring ski in their range, so electing the right skil for your requirements should not be a comblem.

Bindings. Of all the equipment used by wilderness skiers, the Alpine touring binding is the most complex item. There is, however, a good reason for this complexity, and that is safety. The modern Alpine touring binding must serve several functions; it must be easily locked down at the heel when skiing downhill so that the skier has full control of his boards, it must be possible to unlock it easily to free the heel when travelling on the flat or when climbing uphill with skins, and lastly, but

Mountaineering



A well-equipped ski mountaineer using climbing skins and self-arrest ski poles.

most importantly, it must release the skier's limbs when he has a potentially bone-breaking fall.

Over the last ten years touring bindings have undergone an incredible amount of development and refinement, with the result that they are now almost as safe and efficient as any downhill binding. There are many different lypes of fouring bindings variable but you will probably Ind the plate-type bindings to be the best. Who selecting a binding it is always a good idea to make sure that the binding you intend using has at least a toe and hele release, or a two-way heel release as a bare minimum. Safety straps are also essential since a lost ski can lead to disaster in the wilderness.

Useful equipment featured on most good Alpine touring bindings are climbing plugs. These climbing plugs elevate the heels when climbing and take a lot of strain off muscles and tendons on long, steep slopes.

Boots. Only specialist plastic touring or downhill boots should be used for Alpine

touring as the bindings are designed to be used with such stiff-soled footwear

used with such stiff-soled footwear.
Alpine touring boots look like downhill
ski boots except that they usually have
Vibram soles and a removable inner boot
just like double climbing boots. They also
lake crampons without any problems. If
you already possess conventional downhill
ski boots it is quite possible to use these
for short tours or, if they fit exceptionally
well, you can use them for everything.
Plastic lace-up climbing boots can also be
used for alpine fouring but it is possible
you won't have as much control with these
as you would with normal boots
with normal boots
with ormal boots
with orma

Poles. The ideal pole is one that can be adjusted according to the terrain being skied, but unfortunately most adjustable poles still seem to be a bit on the fragile side. The exception is the Ramer self-arrest pole which is fully adjustable, can be converted into a five metre avalanche probe and can be used as an ice axe in a self-arrest situation. Conventional downhill poles can also be used and are indeed preferred by many tourers.

Skins. Over the years there have been different types of skins available that use

various materials and attachment methods. However the conventional mohair glue-on skin is still the king. Many synthetic skins are available today but the mohair skin is still a much more efficient climber than the synthetic version.

The only problem with stick-on skins is that the glue must be renewed on a fairly regular basis and can sometimes be a messy job. It is also important to remember that skins won't stick on waxed skis so don't get them hot waxed!

Accessories. As on any wilderness ski our all the skiers in the group must be properly clothed and equipped to endure the rigours of the winter mountains. All the essentials including map. compass, food, bivvy bag and shell clothing must be carried. To neglect these precautions could be very dangerous.

Technique. It would require several volumes to fully cover the intricacies of Alpine ski technique and there are many fine books available on the subject. I will not attempt to give a blow by blow account of skiing downhill, but there are several techniques that must be mastered before you grab your skis and head for the hills. Briefly, a skier must be capable of making the following turns in a variety of snow conditions; the snow-plough, kick turn, stem turn and basic parallel turns.

Other essential ski techniques that an Alpine ski tourer should master are sideslipping, side-stepping and self-arrest, which is an important technique if you find yourself hurtling out of control down a slope towards a cliff or crevasse lip!

It is also a good idea to spend time practising with the use of skins — putting them on, taking them off, climbing and striding with them — because it does take a while to get used to these furry beasts!

The transition from competent cross country skier to competent Alpine tourer is not an overly difficult one. A few lessons at a lift-served downhill resort should set you on the right path. Certainly cross country skiers with previous touring experience have the necessary survival skill and knowledge required for Alpine touring. Although downhill skiers may have excellent ski technique and ability, they usually lack the important training and experience that skilled ski tourers possess. This imbalance would have to be rectified before a skier who is familiar only with patrolled downhill ski resorts could venture further afield. Alternatively, downhill skiers can hire a ski guide to take them beyond the lift lines, or possibly take an organized instructional course in ski touring or ski mountaineering.

When the limitations of cross country skis and skiers have been achieved, a whole new horizon opens up for the Alpine ski tourer and ski mountainer in what is truly skiing's fourth dimension — the skier is no longer bound by the limitations of frail cross country skis or ugly ski lifts. From Europe's famous Haute Route to New Zealand's glaciers and Kosciusko's summil, the whole Alpine ski touring adventure is out there and waiting, •

Adventure Country

If there is any country in the world that deserves the title "the last frontier," it must surely be Papua New Guinea.

With its spectacular mountain scenery, idyllic tropical islands. seething rivers, untrodden jungles, and heritage of interwoven cultures thousands of years old. Papua New Guinea abounds with unique opportunities for adventure minded travellers

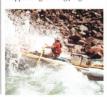


Adventures unlimited

Trekking, rafting, diving and caving expeditions are available promising physical challenges and emotional satisfaction to all with a spirit for adventure.



Under the guidance of leaders who understand the country and its people, anyone who's fit and reasonably active can experience the heady delights of trekking mountain tracks to villages a world away from the twentieth century. With the help of boatmen trained by the company who ran the first rafting expeditions in the Grand Canvon, you can discover the thrills of riding the wild Watut River, a "whitewater rodeo wrapped in glistening jungle,"



Armchair adventures

Softer options for less energetic adventure-seekers include 4 wheel drive expeditions into the Highlands, And for those who demand a little luxury with their adventure, there are PNG's famous wilderness resorts Bensbach and Karawari Lodge.



Here's where to start

For details on Adventure Holidays in Papua New Guinea. contact your travel agent or nearest Air Niugini Sales Office

Sydney: 232,8900 Brisbane: 229 5844 Cairns: 514177



For further information, r	nail this coupon now.
Air Niugini, PNG House,	225 Clarence St. Sydney. NSW 2000

Name	(Please Print)			
Address				



Postcode



WOMEN ARE MAKING INROADS ON YET another male-dominated sport — canceing — in every aspect of which, from recreation to administration, their presence is being felt. They are ordinary women who have a sense of adventure, enjoy outdoor life and don't mind getting wet

Traditionally in canoeing, women have been the wives and girlfriends of the 'real' men who went out and did their thing on the rapids. They organized the car 'shuffle', kept the camp fire going, and generally waited around until the men returned, wet, weary and hungry. They were then expected to become ministering angels to these macho types. But all things change, and women are now taking a share of the action and the fun.

Most women canoeists are found in recreational touring. Whatever the standard or venue, it is likely these days that there will be women in the group. They carry their own gear, make their own decisions and are part of the team. In fact it is only the bulge under the buoyancy vest which indicates their sex. In competition, from slalom to down-river racing, there seems to be an increased commitment from women, a willingness to give whatever it may take to excel to win.

Elizabeth Blencowe, a world-class sprint and down-river racer, is probably Australia's best-known woman canoeist She is our number-one ranked paddler. male or female, and has proved herself in world competition, including her fifth place in the World Titles - the highest position of any competitor from a Western country. At the time of writing, Elizabeth is training hard for selection to the 1984 Olympic Games. Her training programme is arduous, and she has had to give up a number of activities not only because of time constraints, but because of fear of injury. All her energies are now focused on one event

In the administration of the sport, at Left, Yvonne and Chris McLaughlin among the white stuff, Nymboida River, New South Wales, Right, giving it a go—a group of enthusiastic girls. McLaughlin Federal. State and club level, a number of positions of power are occupied by women, Joan Morison, the Secretary-General of the Australian Canoe Federation is a very able administrator and a pioneer amongst women canoeists. A former Australian ladies K2 sprint champion, Joan held her administrative position in the late 1950s, when she was Secretary of the New South Wales Canoe Association. She remembers the fuss when she first wanted to enter marathon races in the 1950s, when there was a lot of antagonism and opposition from men. She laughs now at how a special meeting of the Canoe Association was convened. Advice was sought from the Crown Street Hospital in Sydney, as to whether it would affect 'women's health' if they were to enter such races

Fortunately the myths have been dispelled and attitudes have changed

since then. Joan still paddles in marathon races, either C1 or mixed C2, and has paddled the Murray Marathon five times. But she says her greatest love is touring — real touring, carrying your gear in the

boat, and camping out overnight. Jane Farrance, the Chairperson of the Australian Board of Canoe Education has been canoeling for 18 years. A four times holder of the Australian ladies K1 championship and a Senior Canoe Instructor, Jane is very active in promoting the sport. She believes that community attitudes, such as 'canoeling is a sport for the men, dear,' still inhibit many women from giving it a go.

At State level, women are on most committees and take an active role in decision making, but it is at club level, which is the backbone of recreational canoeing, that women are best represented. One of the biggest canoe



Paddling Their Own

Yvonne McLaughlin tells how women are leaving the campsite and heading for the river.

clubs in Victoria, the Victorian Canoe Club, has a female President and a female Vice-President, and is estimated to have the greatest number of active women paddlers of any club in Victoria

Opportunities for trying out the sport are increasing. Hiring equipment is cheap and easy, and safe venues for beginners are widely publicized. Most States have canceing guides to their rivers.

More schools are offering canoeing as part of their outdoor education programme, so more girls are getting exposure to the sport at an early age, and more women are becoming involved. Once they have had a go, an increasing

is good fun, and anyone can do it. It is skill, not strength, which is the most important factor in successful canoeing and good canoeists use their skill to harness the power of the water to achieve whatever they want. Women learn this quickly

I once saw a woman paddle effortlessly across a fast-flowing river while her male companion, a big, strong-looking guy, exhausted himself lightling the current. The woman's light weight was an advantage but more importantly she was making use of the power of the water instead of trying to overcome it. Strength is not necessarily important, but stamina and endurance are. This is particularly so if a woman wants

follows basic safety precautions, is in a safer position than a pedestrian crossing a busy street. There will always be the unexpected, but that is part of the fun

Cance polo is attracting many women. This fast-moving game is good for developing quick reactions, a fact upon which many women comment and claim that polo has improved their performance when paddling on rivers. There are mixed teams and women's teams, and yes, the women often heat the men

It has been found that women have greater endurance than men in long distance racing and they suffer less from the discomforts associated with this type of activity. Over the past few years, there has been a big increase in women marathon paddlers, so have a look at the finishers at the next Murray Marathon (a gruelling five-day paddle) and you will be surprised at what you see.

Women canoeists now tend to be younger, fitter and with a wide variety of skills gained through trying different aspects of the sport. Women often show men the way on trips and it has been said that, proportionately, the average woman canoeist has a higher level of skill than the average mule canoeist.

Karen Prior, a Victorian paddler, took a path typical of the new breed of women canoeists. She started canoeing at 14, with her family, and quickly became interested in competitive paddling, her first big event being the Victorian Schools Championships, stalom K1. Having got the bug, Karen started paddling and training seriously and soon moved up to bigger events. With Stuart Dry, another young Victorian paddler, she paddled mixed C2 in the 1979 Australian Sialom Championships. In the same year, she competed in the Australian Down-river Race Championships.

During this time Karen was studying for university entrance, and also became a cance instructor with the ACF. At the grand old age of 18, Karen left serious competition, and now is primarily a recreational canceist. 'I got bored with competition, and find touring much more satisfying. I enjoy the challenge of teaching, and like helping others increase their skill and get more enjoyment from canceing.'

Karen teaches canoeing through the Victorian Board of Canoe Education and is an active member of the Board. As well, she plays in a women's canoe polo team, and paddles most week-ends when there is good water.

Öpinions differ on why it is good to have women in the group on canoeing trips—ranging from 'they are more likely to give you a hand when you capsize', to the unprintable! But just about every male canoeist I have spoken to agrees that it s more enjoyable with a mixed group.

Different sources put the ratio of men to women in canoeing as high as 65:35 and as low as 90:10. Women canoeists have come a long way, but there is some distance to cover yet!



The new breed of women canoeists; Mandy Linden in the 1983 Victorian Championships, King River and, right, Karen Prior. Reg Hatch and McLaughlin

number are staying in the sport.
Stereotyped images of women are

disintegrating so far as sport is concerned, and more girls are moving into activities previously considered 'unsuitable'. They are proving gender doesn't count: it is things like enthusiasm, (lest)billty, and staying power which give results.

Canceing is not a glamorous sport — it is impossible to look feminine in full canceing gear! You frequently get wet, and sometimes feel cold and uncomfortable. But that doesn't matter — the girls agree it is a great way to have fun, tremendously satisfying, and that men have had it to themselves too long.

Canceing has a macho image for which Burt Reynolds in the film Deliverance, back in the early 1970s, was in part responsible. To many people canceing seems dangerous, requiring considerable strength and stamina. This can be daunting to women, and many are conneed into thinking they don't have what it takes. This image, however, is a myth. Canceing

to paddle white water, do long trips, or enter competitions.

Because of the fitness phenomenon, more women are exercising in the gym, aerobic classes or running, and this increase in overall fitness is paying dividends. Women realize there is no mystique in being fit, find that paddling is not hard and that they can last the distance. Most importantly, they are prepared psychologically; they are mentally alert, feel competent and have a healthy measure of self-confidence.

Women have paddled all the big white water rivers — the Franklin (Tasmania), the Nymboida (New South Wales), the Mitta Mitta (Victoria), the Barron (Queensland). They have proved they can handle the physical stress of the paddling and portaging, and the psychological pressure of being a long way from civilization and having to be self-reliant as well as a member of the team.

Every activity has its share of danger. In many outdoor sports that touch of the unknown is an additional attraction, whether or not it is admitted. A canoeist who is paddling on water within her capabilities, who has the correct gear and



Lowe Day Packs















THE MOST COPIED RUCKSACK IN THE WORLD.

Lowe Alpine Systems designed and built our first expedition pack in 1967. W have been refining, designing, engineering and improving the same basic model ever since.

From the first, our products have been used on high-altitude climbing expeditions, the most demanding on man and equipment. Many top climbers consider Lowe packs the very best available in fit, performance and quality.

We constantly research textiles, metals and plastics - adding to our knowl of materials performance in various uses and environmental conditions. While other companies copy us, we continue to improve. We think this bec

we pay more attention to design, and learn more from the people who use

See Lowe's great new additions to its range at your nearest Lowe Alpine our equipment. Systems stockist.

Put the best behind you

THE PROPERTY OF THE PARTY OF TH

Lowe Alpine Systems





● EACH SUMMER THOUSANDS OF AUSTRALIAN wilderness lowers head across the Tasman Sea for an energetic and inspiring holiday. They are rarely disappointed. New Zealand, particularly the South Island, is a treasure house of magnificent, unspoilt mountains rising from wild freet new wi-

The recent devaluation of the New Zealand dollar makes such a holiday doubly attractive for Australians. (At the time of writing \$A1.00 equals approximately \$NZ1.60I)

Many Australian visitors are bushwalkers of all levels of ability in search of exciting new walking in beautiful surroundings. They may walk one of the famous tracks such as the Milford Hollyford or Bouteburn. These tend to be spectacular, safe, well supplied with good huts and, at holiday times at least, crowded. There are, however, countless other possibilities. Some like the Rees-Dart walk, are equally spectacular, almost as straightforward. but less well known. Others are limited only by imagination. (See the article on New Zealand's west coast in Wild issue no 5.) Much of the information in this article, such as that about travel and accommodation, will be useful for our bushwalking readers or, indeed, anyone on a budget planning to visit New Zealand.

Increasing numbers of Australian walkers and crockellmbers decided to broaden their experience and skills by trying their hand at mourtaineering in New Zealand. This is perhaps not surprising since New Zealand's mountaineer are both dramatic and beautiful. While the effort required to climb them is often considerable, the wards can be great and are often clearly bushwalk is a vague memory. This special article will be of particular value to anyone who wonders what mountaineering in New Zealand is really like.

The transition from bushwalking or rockclimbing to mountaineering is not easy and, in the past, has too often been a tragically unhappy one. Mountaineering will always be a relatively hazardous activity, but with appropriate knowledge, gear and instruction, the risks can be reduced and its supreme satisfaction made more accessible to 'ordinary bushwalkers'.

The information in this feature is believed to be correct at the time this issue goes to press but readers should check information for themselves before acting on it.

Getting there. Three airlines fly from Australia to Christchurch, New Zealand's usual entry point for mountaineers. Qantas and Air New Zealand both fly from Sydney, Melbourne and Brisbane. TAA and Air New Zealand fly the southern route from Hobart.

The economy return fare from Sydney to Christchurch is \$560. Most budget-conscious mountaineers would opt for APEF (Advance Purchase Excursion Fare). Return APEF fares to Christchurch are:

rom	Off Peak	Shoulder	Peak
Sydney	\$320	\$382	\$438
Melbourne	\$352	\$420	\$482
Brisbane	\$362	\$430	\$494
Hobart	\$320	\$382	\$438
The date of a	and the second		

Hobart \$320 \$382 \$438

The date of outward journey determines the season: Shoulder 1 August to 9 December, Peak 10 December to 31 January, Shoulder 1 February to 31 May, Off Peak 1 June to 31 July.

Conditions of APEF: minimum stay six nights, maximum stay 120 days. Book at least 21 days before. You must pay within 14 days of booking and no later than 21 days before departure.

Climbing course above the Tasman Glacier, Mt Cook National Park. Gary Ball



Craig Nottle on the first ascent of the direct start to Heaven's Door, South Face of Mt Hicks, Mt Cook National Park and, right, at Empress Hut, below Mt Hicks. Mt La Perouse is on the right. (See Wild Information.) Bod Mackenzie

(Changing reservations can be expensive.)
A passport is now required to re-enter

Australia. Allow plenty of time to obtain it.

Internal transport. Air travel is the quickest and most expensive. A one-way flight from

Christchurch to Mt Cook costs \$NZĒZ.
The South Island is well covered by bus routes. Mt Cook Line runs daily from Christchurch to Mt Cook and Queenstown.
Christchurch to Mt Cook is \$NZZ4. A Kiwi Coach Pass is good if you plan a lot of travelling. It must be booked before leaving Australia; 7-, 10-, 15- and 25-day passes are available; 7-day pass

\$A89.
Car hire rates vary between companies. The daily rental rates for a small car booked for three to seven consecutive days (unlimited kilometres) if booked from Australia is \$A35-40, or if booked in New Zealand, \$NZ45-55.

Hitch-hiking is the cheapest but the most unreliable way to travel. New Zealand is good for hitching. However, remember that ice axes can rip upholstery, there are lots of other hitchhikers over summer, and there are some lonely stretches of road.

Accommodation. There is wide diversity in the standards and types of accommodation available.

Hotel and motel prices starting from about \$NZ25 a night for two persons go up to \$NZ120

a night for a suite at the famous Hermitage, Mt Cook.

Membership of the Youth Hostels Association is compulsory if you wish to stay in a hostel. Hostel fees vary from \$NZ4-6 a night. They have dormitories and communal kitchens and bathrooms. It is best to book in advance during peak season.

Motor camps vary from Australian caravan parks in that most motor camps have cabins and communal kitchens as well as tent and caravan sites. Mt Cook has a camping ground with basic facilities only.

There are National Park Board and mountaineering club hust throughout climbing and alpine walking areas. The huts in Mt Cook and Westland National Parks have two-way radios, stores and cooking equipment, but those in other areas are often more basic. Membership of mountaineering clubs may entitle you to reduced fees. Also, some clubs have base to reduced the same that the country of the countr

Zealand Alpine Clubs Unfwin Hut at Mt Cook.)

Why do a course? For a bushwalker or rockclimber, the mountains and glaciers of New Zealand are unknown quantities. Avalanches, crevasses, rock fall, fast rivers and notorious weather are all hazards which have to be negotiated if you are to enjoy the marvellous New Zealand alpine environment. It is not only the hazards — one must also learn how to climb and live with that cold white stuff.

Doing a course is a good and quick way to learn about these things and gain from the experience of some very knowledgeable instructors

Private guiding. There are alternatives to going on a formal course. By hiring a guide with a small group of friends for a number of days it is possible to get the same amount of instruction as you would on a course. The advantages are that you choose your companions and have a much greater say in what you do and learn. Alternatively, you can climb with a guide in the individual manner, with from the client's lack of it. Goognetism shalling you for the client's lack of it.

The advantages of a course are that you can meet new friends and climbing partners. If hiring a guide, there may be many extra costs. The client bears all expenses for the guide as they occur. These include food, hut fees, plane flights into high huts and other travelline expenses.

Weather. As already mentioned, the New Zealand alpine weather is notorious. Our best advice is to take plenty of good reading matter to make sitting out the storms more enjoyable.

The weather patterns are similar to those of southern Australia. The main difference is that a north-west wind, which is usually dry and hot in Australia, is warm and very wet in the New Zealand mountains. Snowfalls usually occur with south-west winds. Because New Zealand's South Island lies across the prevailing winds, the 'Roaring Forties', strong westerly winds are a problem.

Despite all this, there is usually more than one prolonged fine spell each summer!

When to go. The summer climbing season is generally accepted as being from December to March although it is possible to climb outside this period. Christmas/New Year is the busiest time. Early in the season snow routes are often in better condition but there is a greater availanche danger. Late in the season route are often problem as now melts and creases open up. Weather can be better later in summer but this is not always the case.

Clubs. The New Zealand Alpine Club is a good club to join for people wanting to climb in New Zealand. Membership requirements have recently been relaxed, although an ability to prove interest in mountains is still a prerequisite.

Addresses of Australian sections are Southern Section, GPO Box 1432M, Melbourne, Victoria 3001; Northern Section, PO Box A38, Sydney South, New South Wales 2000.

The Australian Alpine Climbers Club is also worth while for keen climbers, but benefits New Zealand are less tangible. Its address is c4-Michael Rheinberger, 51 Park Drive, Parkville, Victoria 3052.

Preparation. Personal fitness and

Preparation. Personal fitness and confidence are fundamental to the enjoyment and safety of most outdoor activities. Mountaineering is especially demanding, physically and psychologically.

An active and healthy lifestyle is the obvious path to fitness. For many, mountaineering will be a natural development of their bushwalking and rockclimbing, but special preparation for a mountaineering trip is important. Activities that develop stamina, such as extended walking and regular joging, will be helpful. A week's walking in New Zealand prior to a course is recommended.

It is difficult to appreciate from postcards and books the awesome scale and overwhelming atmosphere of an alpine landscape. Simultaneously beautiful and frightening, mountains must be approached with well-founded confidence and caution. Enthusicit reading, detailed planning and talking with experienced alpine climbers will help.

Regular rockclimbing with your future mountaineering partner is a good way of developing a mutual rapport at the same time as efficient rope management and belaying

techniques

Clothing and equipment. New Zealand is wet. A suitable windproof and waterproof jacket is a must. Make sure it's long enough to cover your thighs, baggy enough to wear warm underclothes underneath, does not leak and has a hood big enough to lift over your helmet. A double zip will allow extra leg movement when climbing and easy access to your harness when thing on to a roose.

Overpants are also essential, both as a waterproof and, more importantly, as protection against cold wind. Make sure you can get them on and off without removing boots and/or

The extremities of your body must be well colosed-after, hands and feet get very cold without proper care. Gloves are easier to wear than mitties, but not as warm. Deschein mittis are good but need some form of waterproof overmittis. An alternative is Gore-Fex covered, pile-lined gauntlets. Make sure they will keep the sown out, have some form of wist closure and, if possible, reinforced palms. A pair of light hermal or wool gloves is handy when it is too warm for mittis. Remember that mittis must have dispensed to the proper dispense of the properties of the prop

Plastic mountaineering boots have become commonpiace over the last few years, and with good reason. As well as being light, hardwearing and warm, they don't absorb water. This is a great help during multi-day outlings when leather boots would freeze after becoming waterfogged. Plastic boots come in a variety of models in both single and double varisfors, the latter are handy for brouzed when you can keep your feet warm. But you can keep your feet warm by the plant of t

Most climbers climb in a pair of long johns with a pair of shorts on top, an unlikely combination that perfectly suits New Zealand's warm daytime temperatures. The synthetic underwear now available is better than the traditional wool as it doesn't absorb as much moisture and passes perspiration away from the surface of the skin. A good idea is to have a thermal underwear top to match, such as the Helly-Hansen Lifa, which is not too thick to wear on its own during the hotter part of the day. Long sleeves and a neck scarf are important for protection from sunburn: if necessary the scarf can be worn over your nose and mouth. Always carry a warm top such as a fibrepile lacket. It is handy if it has a windproof covering, but otherwise can be combined with your rain jacket. Another consideration with a pile jacket is its collar; a good large one can be zipped up at the neck to keep the cold out

Despite the discomfort, a strong lightweight helmet should be worn. It will help protect you from falling ice and rocks and can be helpful if you have a fall. The helmet should have a simple and efficient strapping system and the size adjustable to accept a Balaclava or hat. The Balaclava must be long enough to tuck into your jacket, and it is useful if it can be rolled up into

Sunburn and eye damage are serious hazards in the snow and at higher altitudes, so it is very important to carry two pairs of sun glasses when climbing. Glacier gogglestglasses should have an elastic strap to keep them from falling off, and side shields to cut out any bright



Hicks

RING, RING, RING.
 It'll stop soon. Oh damn it, I was enjoying that

dream. I'd forgotten about the alarm clock. I'd set it last night hoping the weather would improve—like remembering to put out the garbage ... wonder what it's like outside — probably lousy. Roddy hasn't moved; what an amazing sleeper. Best get up!

Outside it's clear. Stars everywhere and it's cold, cold, cold. Cook's vast bulk keeps us in a moon shadow, but our objective — the South Face of Mt Hicks — is glittering with a new mantle of ice. We start moving.

ce. We start moving.

'Have a guess how cold it is Craig?'

'Negative 6?' 'Negative 8.'

Of all the huts in the Mt Cook region, Empress Hut is the best. It has the best position, the best climbs and a positive feeling.

imbs and a positive feeling. 'How cold is it now Craig?' 'Negative 10?'

'Negative 12.'

'My toes could have told you that. Do you think that thermometer works?'

At the base of the face the temperature was negative 15, but that didn't matter because my foes were warm. In front of us was something we'd seen only in pictures of Scotland: the whole face was absolutely plastered in ice. Tenuous, ephemeral ice lines had appeared after the last storm and the climibing looked exiting. We discarded our original choice of route and started up another.

Thirty minutes later this didn't seem like such a good dea after all. The ce was there, but on placing an ice tool it shattered away, leaving me a good lead after all. The leaves the state of and we returned to our original choice, the Central Cullies. This was easy in concentration. The cent was in good was 5 am when we got to the too of the second pitch. The sum was put peering into the Shalla Glacier basin. Above us its touch methal cis chargement free Below us its rayer acupit the Face of Mt Cook gleamed in sunlight, shedding its loy yell.

We knew the weather would worsen. Bands of cloud were forming on the horizon, but these were left undiscussed. A mixture of cloud and sunshine prevailed for another three hours. At belay stances showers of spindfill would cover us then met in the sun. As yet there was no wind. The weather seemed undecided on storming or not. But on the summit the sunshine left us. Visibility was down to 15 metres and it was really storming.

One of the problems with mountaineering is that you have to get down. Our descent was complicated so I divided it into a number of objectives; the summit ridge, absells in the couloir, absells on the rock rib, the snow slope to the saddle and, finally, the glacier.

The couloir was amazing Our crampons scraped about on the rock-had water lee which covered everything. Absell anchors were difficult to find and there was a feeling of insecurity. The mountain wanted nothing to do with us. From the couloir we moved on to the ris and received the wind's full force. Extra care was required for each movement. Darkness had arrived and it was snowing heavily. But in spite of it all there was a feeling of control. I was enjoying myself.

Beyond the rib lay the snow slope. Roddy's headlamp faltered and our pace was reduced. The rope between us was kept tight and we reached the saddle without incident. Below this the snow slope passed easily and we abselled over the bergshrund to the glacier.

Down on the glacier the real fun began. The hut was only 800 meters away, but it look 45 minutes to reach it. We couldn't see it and our sense of direction was battled by confusing stimuli. We direction was battled by confusing stimuli. We are straight into our ryes inhibited our vision. And sono waviring across the surface of the glacier hid any gradient. It was a curious feeling. We confused on honging for a landmark or a break in the wind to enable us to see the flux. Finally a confused on honging for a landmark or a break in the wind to enable us to see the flux. Finally a coulding with the outline of the hut differ for the outline of the hut differ for the outlines of the hut differ for the outlines of the flux of the outlines of the hut differ for the outlines of the flux of the outlines of the flux of the outlines of the outlines of the outlines of the flux of the outlines o

In the hut the tension left us, but questions remained. Why had I enjoyed the descent more than the climb and how dangerous was it really? • Craig Nottle



Mountaineering course crevasse rescue practice. Ball.

peripheral light. Make sure the lenses are good quality and preferably not of glass — plastic lenses are much safer in the event of a fall or breakage. Some models come with a handy detachable nose piece which gives the nose excellent protection against sunburn.

Many sun protection creams are available so choose a good one. A high protection factor of 15 is the way to go. Apply it regularly and don't forget the backs of hands, neck and ears. Lips should have a special lip protection cream. A wide selection of ice axes and hammers

A wide selection of ice axes and narinners is available. It is most important to understand the difference between them if you are to choose the right one.

The steeper the incline of the pick of the axe. the steeper the angle of the ice it was designed to be placed in. If as a beginner you do nothing more than glacier walks and easy ridge climbs an axe that has little pick droop will be the most practicable. A relatively straight pick is easier to use whilst self-arresting on a sliding fall: a model with a curved pick can have a tendency to rip out of ones hands. Axes such as Vulcans, Terrordactyls, Chacals and Hummingbirds were designed for very steep ice and have only limited use. A good compromise is to choose one of the medium curved axes such as the classic Cliquinard Zero design, the Cassin or Camp models or the Clog Condor. The amount of teeth that are cut into the pick is a matter of personal choice. Many prefer teeth for the full length of the pick. Without teeth, the axe will

have substantially less holding power.

Shaft length may not be important in itself: it is more important ind you know how to use the length you choose. The shorter the shaft, the easier it will be to use on steeper ice. The longer axes are definitely awkward to handle on steep climb but are preferable on the approach walks and easier climbs. Remember that your height is important in determining the ice axe length. Since much of your climbing will not be very technical if may be better to got on the long side — 60-70 centimetres — and forget extremely drooped picks for your first season.

There are several ways of connecting yourself to the axe. Steeper climbs require a wrist opport 1.25 centimetre nylon webbing so that your weight can be comfortably taken directly on your arms and not on your fingers. Some climbers still connect the axe to their harness by a light, but this method is cumbersome as the slings lend to act in the way.

Make sure that the loops are correctly tied on to the axe and are sufficiently adjustable to cater for thick mitts. Some axes have a sliding metal camming device that is connected to the wrist and can be adjusted quickly and easily.

Make sure that the shaft is suitably insulated, particularly if it is metal. The grip, however, must not prevent the axe shaft from being plunged into hard snow.

Although usually shorter, the hammer is otherwise similar to the axe. Instead of an adze which is used for cutting steps or ledges, the hammer head is used to place pitons, ice screws and stakes. It is particularly important

to choose a hammer with a spike on the end of the shaft so that, if the axe is lost, you will be able to descend by using the hammer. Without the spike in such a situation, the hammer would be almost useless.

There are two types of crampons, hinged models and right models. The are for use on any boot, but are best on leather boots with flexible soles when they make walking far more comfortable than do the rigid type. It is never wise to use a rigid crampon on a flexible boot because the stress caused to the crampon can cause it to break. Rigid crampons are now used in conjunction with plastic no-flex boots.

With this rigid system, the problem of the balling-up of snow between the points of the crampons is greater. If not attended to promptly this can, of course, cause a slip, and a sharp tap on the side of each boot with the axe is the usual way of removing the snow. Rigid crampons, despite these problems, have better support and penetration on steen ice. Take note of the way the front points are angled. Some may be curved and others straight. The curved ones are probably slightly better on ice and the straight ones slightly better on rock. What's more important is the length of these points. Short front points are to be avoided considering the softness of the ice present during the usual New Zealand season. The longer points will have deeper penetration and holding power. Straps are very important: it is no good having the best crampons if they are going to fall off. There are many types of straps, but at present the neoprene and buckle system seems to be the most reliable. Whichever you choose, make sure to keep an eye on the wear of the straps and on any slippage that may occur. Always keep your points sharp and remember to carry any spare parts that may be necessary

A single 50 metre rope is usually carried on most climbs. If the climb is long and technical. two rones are often used so that if an absoil retreat is necessary it can be accomplished with more speed and safety than would have been possible had only one rope been available A rope of 8.8 or nine millimetres in diameter is favoured for snow or ice climbing where the risk of cutting is not high and other elements in the 'belay chain' are likely to fail long before a rope of this diameter breaks. A larger rope will be too heavy. If possible, choose a water-repellent type of rope which will absorb less water and thus reduce problems of freezing and weight. If rockclimbing is expected, two ropes should be used

Le Useble Charles in the party should carry a snow. Each offire usual length is about 60-70 continuences whaled alloy angle, it should have continuences where the continuences of the con

stake belays.

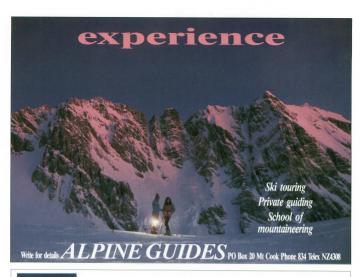
There is a bewildering array of ice screws on the read to be control owners as unyery here shown right of the control owners as unyery here shown right of polar models in the status shown right of the read to the life holding power in ice. The better screws still tend to be the screw-in screw-

New Zealand Mountaineering Courses - Summer 1984-85

				number		Duration	Nights indoors (incl	Deposit	Withdrawal	Price
Course	Course designed for	Course venue	Starting dates	of pupils	ratio	(days)	huts)	(\$NZ)	conditions	(\$NZ)
Alpine Guides (Mt Cook) Ltd, PO Box 20 Mt	Cook, phone Mt Cook 834 (Mana	ger: Bryan Carter)								
Alpine Introduction — Trekking. To develop skills for sale and efficient climbing. Emphasis on ejoying the mountain environment.	Bushwalker or skier wishing to enjoy mountains without stress or strain.	Mt Cook National Park	2 Dec, 10 Feb 17 March	12	1:6	6	3-4	\$100	Less than 2 weeks - no refund. 2-4 weeks - \$75 fee. 4 weeks or more - \$50 fee.	\$495
Alpine Introduction — Technical. To develop skills for safe and efficient climbing. Emphasis on preparation for serious mountaineering.	Bushwalker or skier wishing to develop skills necessary for serious mountaineering.	Mt Cook National Park	11 Nov, 16 Dec, 6, 20 Jan 3 March	. 12	1:6	6	3-4	\$100	As above	\$495
Technical Mountaineering. To teach the skills necessary for high alpine climbing and survival. Includes expedition to practice skills.	Bushwalker or climber intending to seriously pursue alpine climbing.	Mt Cook National Park	10, 25 Nov, 1, 8, 26 Dec. 13, 27 Jan, 3, 24 Feb, 16 March	12	1:6	6	2-3	\$100	As above	\$896
Classic Alpine Routes. To develop existing climbing skills and judgement on ascents of classic 3,000 m peaks.	Person with some rock and snow climbing wishing to extend skills.	Mt Cook National Park	9, 12, 29 Dec, 16, 23 Feb	6	1:3	8	5-6	\$100	As above	\$870
Wilderness Expedition. To develop mountain travel and survival skills in wild and remote places.	Climbers wishing to extend capabilities.	Mt Cook and Westland National Parks.	7 Jan	4	1:4	8	na	\$100	As above	\$750
Alpine Rock. To apply modern rock- climbing techniques to alpine situations.	Climbers with sound rock or alpine experience wishing to extend skills	Mt Cook National Park	23 Feb	6	1:3	8	46	\$100	As above	\$870
Alpine Rock — Advanced. To enable experienced rockclimbers to transfer skills rapidly to alpine climbing.	Experienced rockclimber.	Mt Cook National Park	na	4	1:4	14	9	\$100	As above	\$1,095
Darrans Rock. For crag climbers who wish to extend technical skills into the mountains.	Experienced rockclimber.	Mt Cook and Fordland National Parks	10 March	na	1.2	9	7	\$100	As above	\$995
Alpine Guides (Westland) Ltd, PO Box 38 Fo	or Charles about Eng Charles 975	Olomon Win Browns								
Mountain Introduction. To teach basic mountaineering techniques. Emphasis on attitude and assessment of conditions.	Fit novice	Fox and Franz Neves	na	8	1:4	5	2	\$100	Less than 4 weeks - \$75. 4 weeks or more - \$50 fee.	\$396
Wilderness Expedition. To build up confidence in travelling in remote areas.	Climber with a sound experience of basic mountaineering wishing to extend ability.	Douglas Neve or Landsborough or Spencer Valleys	na	6	1:3	10	0	\$100	As above	\$658
Alpine Recreation Canterbury, PO Box 75 La	ake Tekapo, phone (05056) 736 (Di	rector: Gottlieb Braun-Eh	wer()							
Basic Climbing Instruction. Introduction to mountaineering, teaching basic techniques for independent climbing.	Bushwalker who wishes to reach beyond the bush line.	Hopkins Valley	15 Dec, 6 Jan, 9 Feb, 9 March	6	1.6	8	0	\$303	Less than 30 days - \$303 fee, 30 days or more - \$40 fee.	\$606
Mountain Guides New Zealand, PO Box 93	Twizel, phone Twizel 737 (Directors	s: Gary Ball, Nick Banks,	Russell Brice)							
Mountaineering. To make participants self sufficient in New Zealand's mountains.	Fit, keen person with no climbing experience.	Hopkins Valley	15 Dec, 11 Jan, 4 Feb	6	1:6	8	3-4	\$100	Loss of deposit	\$525
Alpine Climbing. To teach the most advanced alpine climbing techniques on major alpine routes.	Fit person with plenty of personal drive.	Central Southern Alps. Depends on members' preference.	26 Dec, 20 Jan	6	1:3	14	10	\$100	Loss of deposit	\$1,250
Mountain Recreation, Professional Mountain	eers PO Rox 204 Warsaka phone	Wanaka 7330 (Director)	Geoff Wavatti							
General Mountaineering. To introduce the skills and attitudes required for climbing in the Southern Alps.	Bushwalker, ski tourer or very fit outdoors person.	Mt Aspiring National Park	17 Dec. 6, 28 Jan. 7, 17 Feb	na	1:6	8	0	\$50	Less than 40 days - \$30 fee if replacement found otherwise no refund, 40 days or more - \$20 fee.	\$495
Alpine Skills. To provide skills for efficient signe peak climbing in the Southern Alps.	Experienced bushwalker and rockolimber,	Mt Aspiring National Park	27 Nov, 7, 17, 27 Dec, 6, 16, 28 Jan, 7, 17 Feb	na	1:6	8	0	\$50	As above	\$495
Advanced ice Climbing. To develop realistic confidence and capability on difficult and arduous alpine ascents.	Fit, rock and alpine climber wanting to sharpen techniques or lesser climber wishing to develop competence.	Mt Aspiring National Park	27 Dec	na	1:6	8	0	\$50	As above	\$495
Summer Glacier Ski Camp. To learn glacier travel and ski high peaks and glaciers. Includes one helicopter lift.	Strong skier who wished the season hadn't finished.	Mt Aspiring National Park	27 Nov	na	1:6	6	5	\$50	As above	\$570
Trans Alpine Expedition. To travel through seldom visited alpine areas and refresh skills.	Climber with moderate alpine experience.	Mt Aspiring National Park.	16 Jan	na	1:6	8	1-2	\$50	As above	\$495

New Zealand Mountain Guiding Services

Total guiding to 1 client	ee (\$NZ) per day 2 clients	3 clients	4 clients	5 clients	Extra for food (\$NZ) per clientiday	Deposit	Withdrawal conditions	Areas guided
Alpine Guide \$145	(Mt Cook) Ltd \$150	\$150	\$160	\$200	\$25	\$100	As for courses	Mt Cook National Park
Alpine Guide \$132	\$132 \$132	\$132	\$132	\$132	\$18	\$100	As for courses	Westland or Mt Cook National Parks
Alpine Recre. \$125	stion Canterbury \$125	\$125	\$125	\$125	\$25	50%	As for courses	By arrangement
Max Dorfliger \$90	, 40 Church Stre \$90	et Reefton, Pho \$90	ne Reeffor \$90	560 \$90	By arrangement	na	na	Preferably Westland National Park
Mountain Gu \$150	des New Zeslar \$170	nd \$200	\$250	\$300	\$25	\$100iclient	As for courses	Throughout New Zealand Alps





FOR WARMTH IN A WILDERNESS

J&H PO Box 5 Campbell ACT 2601 Australia

The draft tube construction and zipper guard, the three panel foot section and the carefully detailed hood are

all features that again exceed the design quality of all other bags available." Excerpt from the Industrial Design uncil of Australia product sessment of the J&H Winter-lite. about six screws for a party of two.

It is a good idea to carry a few pitons on the rack or in your pack. A couple of thin blades, a Lost Arrow or two and a couple of small angles can be very handy.

Unless the climbing is hard, a lot of gear will be unnecessary. A general rack comprises a few mixed nuts in the smaller sizes, a few wires and a selection of three or four Friends. Twelve or 15 karabiners will complete the rack. It is a good idea to have at least one long sling that is carried double and can be used on bio blocks.

is carried pouple and can be used on high process. Your harnesses must be confortable (and Your harnesses must be confortable (and remove boots and/or crampons. Gear loops are handy. Don't forget to carry a good head torch with spare globes and alkaline batteries. Head torches are needed for most climbs and are notorious for failing when you need them most. Harmore hotsers can be placed either on the pack (within reach) or on the harness. The terms of the process of the pack of the pack of the pack of the pack within reach) or on the harness.

Prussik loops are essential. You must have ones suited to you and know how to use them. In crevassed terrain they should be in place on the rope and at all other times within ready reach. Mechanical devices are easier to use but too heavy for New Zealand mountaineering.

A Sticht plate, or similar device, which can be used for belaying and abseiling, is a good idea. It must, of course, be used with a screw-gate karabiner.

Frameless or, preferably, robust and waterproof internal-frame packs are more suitable than packs with external frames.

Remember to try to keep your equipment to a minimum when out on the hill. However, don't go overboard and take too little! Try to judge what you will need to make things enjoyable for yourself and at the same time, safe. Complete equipment lists are provided by each mountaineering school. Be guided by informed local advice.

Main climbing areas. Mt Cook National Park holds pride of place having most of New Zealand's highest peaks. Heavily glaciated, it has little greenery and a lot of glacial debris, but good access to both easy and hard climbs.

On the west side of the Divide is Mt Cook National Park's twin, Westland National Park. Rising from near sea level to more than 3,300 metres, its attractions include both lowland forest and huge neves feeding fast-flowing glaciers. It is serviced by the towns of Franz Joseph and Fox Glacier.

Mt Aspiring National Park, although not as high as Mt Cook and Westland, is very popular. Its beautiful bush-filled valleys ofter varied walking while Mt Aspiring and other peaks have interesting climbing in a more remote setting. The best access is from Wanaka.

The rugged and steep Darrans are further south in Fiordland National Park. They have

hard rock routes as well as some snow climbs. Arthurs Pass National Park, while having only limited climbing potential, is a good place to get fit as it has good walking and good access from Christchurch by train.

There are other areas than those described here, in both the North and South Islands, but space limits their inclusion.

Further reading. The Mount Cook

Guidebook by Hugh Logan, published in 1982, now includes climbs west of the Divide as well as those in Mt Cook National Park.

The Mount Aspiring Region by Graham Bishop, revised edition, 1981.

Moir's Guide Book, two volumes, Northern Section (fifth edition 1977) edited by Lawrence

Kennedy, and the Southern Section (fifth edition 1979) edited by Gerard Hall-Jones. These are walkers' guides to the south-west corner of the

South Island.
All the above books are published by the New Zealand Alnine Club.

Mountaincraft, Mountain Safety Manual 3 by Lindsay Main, published by New Zealand Mountain Safety Council second edition 1980.

Maps. New Zealand is well covered with one inch to the mile contoured maps and other special maps of National Parks. They are difficult to obtain in Australia but can be purchased in gear shops and National Parks





Early morning ice — on the South-west Ridge of Mt Aspiring. Glenn Tempest

Visitors Centres in New Zealand, or by writing to the Department of Lands and Survey, Private Bag, Wellington, New Zealand.

Equipment retailers. These specialist suppliers are an excellent source of local literature (guide books, general references and maps) and advice. See the Wild Directory for further information.

Other courses. This survey only includes courses run over the summer of 1984-85. A number of the companies mentioned run winter climbing, ski mountaineering and cross country ski trins and courses.

ski trips and courses.

The New Zealand Avalanche Institute (PO Box 36, Mt Cook, New Zealand) has courses on ski area avalanche control and snow safety, also held over winter.

Many (New Zealand) clubs run instructional courses for members. ●

Chris Baxter is editor and publisher of Wild. Since Contributors notes on form Miller were publisher of Contributors notes on form Miller were publisher with Wild no 4 he has been on an expedition to India's highest peak, Nanda Devi, Anado Devi, Anado Devi, Anado Devi, Anado Devi, Anado Devi, Series distribution manager. Glenn Tempest (see Contributors, Wild no 4) has also climbed in Himalaysas recently. The three have a combined New Zealand mountaineering experience of many season.

Track Notes

Kanangra Canyons

A guide to these Blue Mountains wonders by Dave Noble.

IN THE VICINITY OF KANANGRA WALLS THERE ARE MANY waterfalls which can be visited when using canyoning techniques. These Kanangra Canyons, quite different in character to the constricted sandstone canyons of the northern and central Blue Mountains of New South Wales, are typically open, with massive waterfalls tumbling over quartzite cliffs. Despite being accessible to sunlight, they are no less committing than the sandstone canyons and encompass some of the most spectacular scenery to be found in the Blue Mountaine

Many of the canyons can be comfortably visited in the cooler months as no compulsory swimming is involved. However summer with more hours of daylight, is probably the best time to attempt them: the option of a swim in the abundant crystal-clear pools is a worthwhile bonus

It is not the intention of this guide to give a detailed step-by-step description of each canyon which, the author feels, would lower the challenge of some canyons, particularly the more remote, less frequented

The information given should be sufficient to enable and encourage competent and experienced canyoners to visit some of these speexciting places. The directions left and right are

given as facing downstream.

Difficulty of Trips. For the majority of these

canyons, the level of difficulty depends greatly on the water level and weather Dione Dell is an easy trip, well suited to beginners

(with suitable leadership). All the others, including Kalang Falls, should be regarded as serious and potentially dangerous undertakings.

The experience of a party that includes one or two competent people as well as beginners may give the impression that a canyon is easy. A different party may find the same canyon a nightmare with rones jamming, followed by being benighted in freezing conditions with little food.

Maps. All the carryons mentioned can be found on the following Central Mapping Authority of New South Wales maps: Kanangra 1:31,680 or 1:25,000 (new edition), Yerranderie 1:31,680 or 1:25,000 (new edition), and Jenolan 1:31.680 or 1:25.000 (new

Safety. Most, if not all, the canyons in this guide have the potential to be extremely dangerous. Many of them not only require that all party members are competent at abseiling in awkward places but also they should be proficient in rigging and de-rigging pitches. (It is vital to have no knots or tangles in ropes on overhands)

As these canyons are of a more open nature, the consequences of a flash flood may only mean the party may be stuck on a ledge rather than swept over a waterfall. Nevertheless rain can make the rock extremely slippery

Large parties should be avoided for the more serious trips. Often there is insufficient room for more than one or two people to stand near a belay point, so multiple sets of ropes may need to be carried even with parties of only four people.

Large parties also increase the chance of loose rocks being dislodged. Helmets are strongly advised for this reason, particularly in Kanangra Falls, perhaps the most dangerous of the canyons.

Warm clothing and a parka or spray jacket should be taken to avoid exposure. The spray from the waterfalls can be very cold even in summer.

On your first visit to some of these canyons it is often wiser to go with people who have previous experience of the carvon. Many bushwalking clubs in the Sydney area organize regular trips to the canyons and are a good source of technical expertise

Equipment. Two ropes, preferably both of 50 m should be carried as a minimum. On longer trips with parties of four or more, two sets of ropes and a 'leanfrog' technique can speed up progress

Many belay slings of various lengths should be

carried. Old slings found at the top of abseils should he treated with great caution. Back them up with a new one. Slings may be needed to be attached to holts

Piton brake-bar abseiling is probably the safest abseiling method to use in those canyons where there is a high chance of dropping krabs or figure-8 descenders into deep pools. It is vital the piton used as a brake-bar is longer than the longest diagonal of

The lovs of canyoning! (Danae Brook) Photos Noble BUNGLE RAIGE Kanangra Walls Area KRUNGLE BOYD ▲ Mt Paralyser PLATEAU RIDGE NJAA Mt Cloudmaker Mt Thurat 4 Kananora Walls RANGE Dione Dell COLBOAD GINGRA BOYO RANGE





The Cascade is a deluxe parka, Superb detailing assures you of total protection under the most demanding mountain conditions

Stormproof snuaness

The Cascade's firstclass storm protection starts with a special 3-layer Gore-Tex taslan laminate that looke and feels like traditional cotton poplin, but protects only as a waterproof breathable Gore-Tex laminate can. A wide weather flap covers the front zipper. snapping down to shut out spindrift and winddriven rain.

Weatherproof hood A carefully designed hood covers your head completely without



restricting movement Those who wear glasses will particularly like the stiffened wire visor in the rain.

Heaps of pockets Large cargo pockets with built-in bellows expand fully to hold camera lenses, lunch and hat with ease. If your hands are cold, slip them into the handwarmer pockets behind Two other cargo pockets are set high for easy access when wearing a pack, there is even a pen pocket for field notes

Under-arm zips Under arm zips offer extra ventilation during periods of exertion



last word in waterproof mountain parkas for the fly fisherman, naturalist, climber or walker

Sizes: XS, S, M, L, XL.

PAPUA NEW GUINEA

TREKKING, DIVING, CAVING, RAFTING HORSE RIDING, 4 WHEEL DRIVE, SEA-PLANE ADVENTURE AND NATURAL HISTORY EXPEDITIONS

For 7 years we have been organizing adventure holidays to this unique South Pacific destination. Join one of our highly experienced leaders on an expedition of involvement and discovery.

The fauna, flora and marine life are unique, many species of which are indigenous to Papua

are indigenous to vapua New Gunea Spectacular birds of paradise, rare orchids, vast river systems, un forms, snowy mountain peaks, smoking volcanees, sweeping alpine grasslands and idyllic tropical islands. (And that's just the beginning).

For our free colour catalog contact:

NEW GUINEA EXPEDITIONS

4th Floor, 28-34 O'Connell Street, Sydney, Australia
Phone: 231 6066 Telex: AA22179

Water Sport in Tasmania

Suppliers to all water sports. Complete rafting supplies; wet suits, paddles, buoyancy vests. Tasmania's **No 1** manufacturer of kayaks, canoes and Tassie Flyer wave skis. Brochures available.

CANOE, SURF & SAIL



the krah

Prussik slings or Jumars are essential. Helmets are recommended

Kalang Falls 1 day, 2 x 50 m ropes, no swims Kalang Falls is a long set of waterfalls that start near Echo Head and tumble down the side of Kanangra. Deep. With easy access and a spectacular settly is little wonder that this trip has become very popular — parties should bear this in mind when considering their starting time and party size. For large parties several sets of romes should the used.

From the old Kanangra carpark, walk along the road towards Eho Head and follow a track to the north-west down a spur into Kanangra Brook. The first waterfall starts 100 m downstream it can be easily abselled on the right-hand side from a tree belay (35 m). The next waterfall is a 35 m drop and can be abselled in one absell be careful of rope jam) or two short drops. The belay is a tree on the right-hand side. The third and fourth allia are best abselled on the leftMany lengths of thin sling are required for all the bolt belay. There are many loose cocks, particularly in the belays. There are many loose cocks, particularly in the slot and great care must be taken. — helmets should be worn. Ropes for parties larger than three people must be at least 50 m. 45 m ropes et han three people must be at least 50 m. 45 m ropes are too short. Party members should be experienced are too short. Party members should be experienced, and some could be be very dangerous in even normal valer levels. (The both belays were placed in during a drought.)

To start the trip, leave the Kanangra Road at the clay units (500 metres back from the carpark) and cross Kanangra Brook. Head across the mainly open Kiltani Health to eventually reach the top of the main fall. Climb round on a large ledge to the left, level with the top of the fall, and locate a set of boths where the ledge begins to peter out. From here it is a speciacular 50 m absell down into a slot on to a sloping boulder-covered false floor. A hand-line may be needed to reach the next belay point, just above the next drop.



Kanangra Walls

hand side — be careful again of rope jams when retrieving the rope, especially on the long (50 m) fourth absell. The next few waterfalls are short and can be abselled or scrambled round. The fun starts again with a 30 m absell down a ramp on the left side of a waterfall. If the ramp is wet, it is very easy to slip into the waterfall.

Not fat below is the highlight of the trip, a waterfall about 70 m high. This is abselled in two stages on the left side (slings needed for belay). Make sure you stop about half-way down on a convenient ledge, and use a tree belay to reach the bottom. The last fall can be bypassed by scrambling or abselling (40 m) on the

The usual exit is the gully 100 m downstream of the Kanangra Creek junction. This gully, Murdering Gully, Can be difficult and dangerous in wet weather. It is a short, steep climb to the defile between Kanangra Walls and the car-park (30 minutes to 1½ hours). Note: many absells in Kalang Falls can be scrambled, and Murdering Gully can be reached from

many places by horizontal scrambling.

Kanangra Falls 1 day, 2 x 50 m ropes, short swims

Kanangra Falls consist of about half a dozen giant waterfalls at the head of the Kanangra Deep. To quote from the Gundungura Book's description: This descent typifles the grandness of scale of the Kanangra Canyons which is unsurpassed anywhere in the Blue Mountains'.

Until recently, the main fall (100 m) had to be bypassed by scrambling routes on the right side. Now, belay points consisting of sets of stainless steel bolts exist down the dark slot behind the main fall. Bolt belays can also be used for most of the lower falls. This drop (dangerous because of possible rockfall from the ledge above) of 50 m almost reaches the bottom of the slot. **Great care needs to be taken throughout this section**, particularly in rigging the second belay point.

Two shorter absells and an avoidable swim lead on to a large ledge on the right side at the bottom do to a large ledge on the right side at the bottom de slot. Great care needs to be taken so that the person in front does not get swept over one of the drops. The thing the slot of the slot of the slot of straightforward. Climb further to the right (e-posed) until it is possible to absell into a large gaily that, incidentally, provides a scramfuling route* ack to the large slot of the slot of slot slot of slot slot

Near the bottom of the gully there is an easy 50 m abseil beginning at the left and finishing at the right of the waterfall. From the bottom of this drop, the going is easy, with only an avoidable water-jump, before coming to the top of the next main waterfall - a drop of about 80 m. One route from here is to leave the creek and climb over a small ridge to the left and abseil down the wall to the left of this ridge — howe belay points (trees) require some scouting. The other route is to proceed by scrambling or using a hand-line to reach the top of the large single drop. Bolt belays on the right can be used for a 50 m absell to a large ledge near the bottom of the fall. This ledge can be dangerous in high water. In low water it is possible to scramble back to the floor of the creek, otherwise an abseil may be required.

The next waterfall follows soon and can be abselled on the left (50 m) into a pool. An old belay point, a tree on the right, seems to have gone

There are two remaining waterfalls and only the top one presents an obstacle. It can be scrambled on the left (difficult) or abselled on the left (20 m, easy).

Two tough lightweights

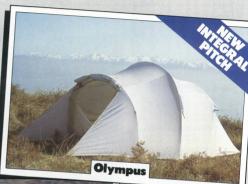
....without the heavyweight price tag

OLYMPUS

The Olympus will shelter you in the most severe weather. It's built to withstand winter snows, summer downpouts, and years of hard use. There's enough space inside for two to live in luxury. Yet it weighs less than many summer tents — only 3.1kg.

With the integral pitch system, fly and inner go up together in one operation. All you do is thread the three shock-corded poles through their sleeves, and peg out the four comes. Two minutes later that's it! Or you can pitch the fly by tisself, giving you a spacious shelter weighing just 1.7kg for superlight trips. For insectifiee shade on hot summer days, just pitch the inner.

The tough Olympus — secure, comfortable shelter for the high, wild places.



Twilight

TWILIGHT

If you enjoy travelling light in summer, you'll like the new Twilight. It weighs just 2.5 kg. Yet it has pleinly of room for you, a firend, and your equipment. Its near vertical side-walls give you dimost 30% more useable would give you dimost 30% more useable concerned to the sample to pitch—just thread the two shock-corded polest through their loops peg out the four corners, clip on the fly, and it's und

Lots of mesh keeps the insects out, and allows the air to circulate to keep you cool on hot nights. The aerodynamic shape shrugs off winds and rain that would crumple ordinary tents.

Twilight — light, roomy and built to last. It's all the shelter you'll need during Spring, Summer and Autumn backpacking.

Ask to see the Olympus and Twilight at one of these specialist stores:

QUERSIAND TOWNSVILE Townsville Buhnslating Supplies/FORTINDE VALETY Sout Outdoor Centrell/SVCN, Tome Novincian Crahety SQUIT WALES NEVS. SALE, Bush Escaper/ACO-SQUIR Novincian TRAINDY CARREAD, Buhngeron/NCTGRA MELGOURNE, Bush and Mourton's Sports, Bungeron/DCHILL, The Villetimess Shop/TASMARIA LAUNCESTON, Allgoods/HODART, Outdoor Equipment, Sout Outdoor Centre/BUPNET, Crange Outdoor Centre/BUPNET, Evange Control Co



although it has been jumped (for the foolhardy?).
The usual exit is via Murdering Gully, as described for Kalang Falls.

Danae Brook 1 long day, 2 x 37 m (min) ropes, short swims
The 'Brook' is a very exciting, spectacular canyon.

It is suitable for **experienced** parties. Many of the absells have awkward starts and finishes and great care needs to be taken to avoid rope jarms. This caryon can be difficult and dangerous in high water. Even in good conditions incompetent parties have found themselves benighted in the caryon.

The two common ways to reach Danae Falls are from the Mt Thurat Road — it is probably best to get into the creek as early as possible to avoid ridge-top scrub — and, 2 from Kanangra car-park walk back along to the clay ruins. Head across the Kittari Heath and cross Kanangra Creek above the falls. Cross Big Mist and drop into Danae Brook before the falls.

The first cascade-waterfall is probably best scrambled on the left to reach the lowest tree belay. From the tree a 35 m absell leads into a narrow fissure next to the waterfall. The next absell requires a long sling for a belay. It is an awkward 30 m abseil over chockstones to a pool. The canyon here is almost narrow enough to chimney With care it is nossible to avoid a cool swim in the pool at the bottom. A log or thread belay is generally used for the next abseil (40 m), most of which is free fall down a waterfall. This abseil and the next are the highlights of the trip. After the waterfall abseil, the canyon opens up somewhat a steep gully on the left has been climbed and could provide an escape route. Several routes exist from a large ledge on the left. The most spectacular route. Danae Direct, is from a thread belay, following the course of the water (difficult start). Alternatively a tree on the left provides a belay for an easier, although less spectacular, abseil. In very high water, the ledge can be followed further to the left, past the gully described above, towards a pinnacle - the wall below the ledge can be abseiled in two stages, so avoiding the 'slippery log' abseil. (Good belay points difficult to locate.)

The 'slippery log' absell follows below the Danae Direct absell. It is difficult in high water because usually, the rope cannot be thrown the whole way down the waterfall in one go. This means that the first person must stop part way down and untangle the rope — the higher the water, the more difficult this becomes. The absell ends on a slippery log jammed

in a small nool

From the bottom of this absell, the carryon opens up somewhat and the going becomes easier. A 20 m absell from plons on the left is the first in a series of easy, short drops, some of which can be climbed down in dry conditions. The final large waterfall is about 30 m and can be abselled from a piton belay on the left. Be careful of rope jams here.

Below this waterfall is a possible (poor) campsite. Next follows a massive boulder chute contained between enormous towering walls. It is great fun scrambling down the boulders although care still needs to be maintained.

A short absell (or hand-over-hand) completes the canyon, 100 m below this last drop a steep scree gully on the right provides a route to the col between Spire

Head and Thurst Spires

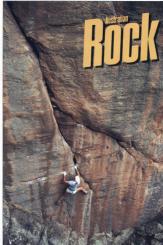
It is a pleasant walk down the rest of Danae Brook the Kanangar Greek junction and the more usual exits: 1 Climb directly opposite to Kilpatrick Causeway and return via the track to the Walls. 2 Walk upstream along Kanangra Creek and out via Murdering Gully. 3 Climb the righe to Thurat Spires (one absell for Second Spire) and out via Big Misty — a slow but spectacular route.

Dione Dell 1 short day, 2 x 40 m ropes, no swims Dione Dell is the name given to the carryon high in Christys Creek. An alternative name is Myles Chasm, named after Myles Dunphy by Max Gentle, both pioneer bushwalkers in the area.

This is the easiest canyon in the area and it is an easy and enjoyable trip for beginners. If necessary, each waterfall can be climbed round without great difficulty. Despite its ease, it is still an enjoyable trip for experienced absellers.

To start the trip, leave the Kanangra Road about two kilometres before the car-park, opposite the Mt Thurat Trail, and head south a short distance through scrub into Dione Dell. The walk down the creek to the waterfalls is very pleasant.

The first waterfall is at the junction with Christys Creek. It is best abseiled or scrambled on the right (20 m). It is soon followed by another fall (25 m) which



You'll be blinking in the chalk dust. brushing away beads of perspiration and saving farewell to your arms as you snatch for the jugstrewn pages of Rock '85. Get Rock. the Australian climbing magazine, where outdoor magazines are sold. or order direct from the publisher. Rock '85 is on sale from November 1984 The price is the same as last year, \$3.60. Don't miss out, send a cheque or money order today for \$A3 60 (includes nostane anywhere in the world) to Wild Publications Ptv Ltd. PO Box 415, Prahran, Victoria 3181 (Back Issues: 1978, 1979 \$A1.95 each, 1983, 1984 -

\$A3.60) Trade enquiries

welcome Photo: Rack editor

Chris Baxter, on Rosshalde.



Articles on outdoor

sports.

WE EXPORT GEAR ALL OVER THE WORLD-EFFICIENTLY-ECONOMICALLY

FOR AIR MAIL DELIVERY SEND \$A5 BY BANKERS DRAFT

FIELD & TREK (Equipment) Ltd

DEPT 7AW 3 WATES WAY, BRENTWOOD, ESSEX, ENGLAND CM15 9TB

Write today for your



- bushwalking
- canoeing
- camping
- skiing
- climbing





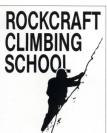
send for your . . . <u>Free</u> "Catalogue of NSW Maps"

Name	
Address	
	D4d-

Maps can be purchased from your local CMA map agent, the Department of Local Government & Lands and the Government Information Service, Sydney, or the...

CENTRAL MAPPING AUTHORITY of NEW SOUTH WALES
PANORAMA AVENUE, BATHURST NSW 2795

Telephone (063) 31 5344



- Rockclimbing
- Abseiling
- Alpine Climbina
- Ski Mountaineering
- Trekking
- Guided Climbs Instruction Courses.

Expeditions.

Write for our brochure. 285 Main Street Katoomba NSW 2780, (047) 82 3467.

Melbourne Map Centre 569 5472



- NATMAPS (All States) VICMAPS 1:25.000, 1:50,000
- FORESTS COMMISSION
- TASMAPS 1:100.000
- C.M.A. (N.S.W.) 1:25,000
- 1:50.000, 1:100,000 LANDS DEPARTMENTS (S.A.)
- 1:50.000 ● COMPASSES ● GUIDES









can be abselled from trees on the left or right

The highlight of the canyon is ten minutes downstream — a waterfall falling out of sight round a corner. The belay point, a tree, is reached by scrambling down to a low ledge on the right (35 m

about to a lodge) Further downstream, a short absell down a 10 m fall completes the canyon. The exit route is to walk to Margaret Falls, then climb out a spur on the left until the Colboyd Range Track is reached. Follow this out via Wallahy Pass (past the Grotto of Uranus) and Pindari Tops

More Remote Canyons

Most of these canyons require two days. Hence it is necessary to absell and sometimes swim with a full pack. In many of the creeks, absells can be bypassed by scrambling, although this often necessitates a long detour from the creek bed. In all cases 2 x 50 m ropes are sufficient

In many of these canyons, there are many possible routes and belay points

Middle Christys Creek usually 2 days, 2 x 50 m

ropes, swims Christys Creek below Dione Dell provides a worthwhile trip. Margaret Falls can be reached by going down Dione Dell as described above, or by going down the Colboyd Range Track over Pindari Tops.

The major difficulty is Margaret Falls itself (100 m) which can be scrambled easily to the left (a fair way from the creek - down a long scree) or abseiled in stages down a steep bank well to the right of the fall (100 m). Note that most of the main fall overhands Below Margaret Falls are more waterfalls and

East Christys Creek 1-2 days, ropes and swims

This can be entered high up by following the creek down south of the defile between Kanangra Walls and the old car-park. Leave the track at the Dance Floor

This creek is very beautiful and contains numerous waterfalls and cascades. Many of the waterfalls make attractive abseils

West Christys Creek 2 days, 2 x 50 m ropes, no

The two branches of this creek - Wheengee Whungee and Wooglemai Creeks make excellent trips. Be very careful of loose rocks in the major waterfalls Wooglemai Creek has a large waterfall (45 m) through a parrow defile. The main falls in Wheengee Whungee Creek are too large for a single direct abseil. The fall can be abseiled to the left with some scrambling and scouting for belay points needed

After these two creeks meet there is a series of waterfalls, several of them high, all worth visiting. Note that it is possible for fast parties to reach the Kowmung River from high up in any of the Christys Creek branches in one long (summer) day

Thurst Rift 1-2 days, 2 x 50 m ropes, no swims This provides an excellent trip for experienced parties. It features quite a few long abseils (50 m) and steep scrambling (and consequently requires careful route-finding

The creek is best entered high up from Mt Thurat, to avoid scrub on the ridges. The nature of the trip is similar to Danae Brook, but less committing Carra-Beauga Brook 2 days, 2 x 50 m ropes, no

Another excellent trip, this creek is somewhat similar to Kalang Falls. It is certainly at least as spectacular. The creek can be entered from the

Thurat-Paralyser Range. The main fall (the first really big drop) is best abseiled in stages on the right side.

Davies Creek 2 days, 2 x 50 m ropes, no swims Drop into Sally Camp Creek from the Thurat-Paralyser Range (or elsewhere). This creek is particularly spectacular on a grand scale

The major difficulties are encountered on the second waterfall (50 m), which requires careful choice of belay point. The large fall at the bottom of the canyon can be partly down-climbed

Other Creeks

The following creeks contain waterfalls that can be abseiled (or scrambled) and can be done as canyoning or bushwalking trips. (None has compulsory swims.) Mumbedah Creek, Whalania Creek, Ti Willa Creek, Gingra Creek (upper part), Mathesons Creek and Doris Creek. As well, the Kowmung River has three sections of canyon (none requiring abseils) accessible from Kanangra Walls (Morong Deep, Moona-Loomba Canyon and the Bulga Denis Canyon). •

TRAMPING - CLIMBING Courses and Expeditions



Full service from Christchurch: Transport, Food, Guide, Equipment, Accommodation

Bookings: Outdoor Sport (Snowline) Ltd 252 Oxford Terrace, Christchurch New Zealand. Phone (03) 67 351



ALPINE RECREATION CANTERBURY LTD PO Box 75, Lake Tekapo

Where else in the world can vou get worldrenowned brands all at the one shop?

- Kober
 Ace
 Priion
- New Wave
 Lendal
- Mitchell
 Harishok
 Rec Wildwater Centre
 B-Line
- Lettmann
 Perception
- Rapidcraft

Plus: Full film and video library and expert service in all facets of canoeing and rafting

Cannes Plus

140 Cotham Road Kew 3101 Phone (03) 80 5934

WOMEN!

Learn how to rockclimb with women Sheer Height

Rockclimbing School for Women offers you safe expert instruction by Australia's leading women climbers

*beginner, intermediate and advanced courses *maximum of 2 students per instructor

*our week-end courses cost \$120 per person (2 students) or \$180 per person (1 student)

*longer courses also available

For more information write to Louise Shepherd, Sheer Height, PO Box 20, Natimuk Victoria 3409. Phone (053) 87 1329 or phone Maureen Gallagher (03) 669 3242 (working hours)

Reviews

Wilderness Diary 1985 edited by David Neilson (Australian Conservation Foundation, 1984. RRP \$12.95)

This diary deserves a hearty welcome from all wilderness lovers. The first Australian wilderness diary of this standard, it promises to be a popular Christmas present this year.

The diary's format features a week to a page. with a practical spiral binder. The left-hand page of each spread is taken up with a single photo from one of Australia's wild places. The variety of photography is breathtaking, and the quality is superb throughout. Reproduction is of a generally high standard, although there are one or two examples in which the photographs appear to be too dark

Very reasonably priced at \$12.95, this diary cannot be recommended too highly, even if you don't need a diary! Brian Walters

Battle for the Franklin by Roger Green (Australian Conservation Foundation/Fontana, 1983 BBP \$8.95)

I dislike confrontation, so although I attended the Franklin blockade and felt very strongly about the issue, a tendency to conciliate led me to hope some middle ground might accommodate the pro-dam arguments. It was not to be. The issue was fought out to the finish. right to the High Court.

Looking back it now seems inevitable that the issue would not settle, because the Franklin involved a conflict between two fundamentally opposed directions for Western society. It was a focus for far deeper dilemmas than the question of whether a river should be saved. Despite all the complexity of the arguments, the pro-dam position was one which ultimately saw economic considerations as the key to use of resources. Even though the dam made no sense on economic grounds, the heart of the opposition to it lay in a realization that there were values more important than money: responsiveness to natural beauty, the ability of people to relate to their surroundings and spiritual sensitivity. The importance of this clash of values

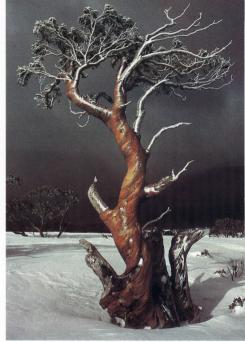
extends far beyond the Franklin.

The contribution of Roger Green's book is that it touches on these deeper values. It must have started as a simple, journalistic idea to interview as many people as possible across the spectrum involved in the Franklin campaign. The result is a powerful book of considerable scope as people reveal the values that motivated them

A broad range of views is expressed, from people such as Robin Gray and Eric Reece to Bob Brown. Most of the big 'names' are there, and several less well-known ones, but there are significant omissions. We hear nothing from Harry Holgate, from the powers-that-be in the Hydro-Electric Commission, from the lawyers involved in the dams case or even from 'ordinary' blockaders. But what we have is enough to paint the outlines of the picture.

John Mulvaney (archaeologist) begins to refer to the real issues when talking of Kutikina Cave: 'So I was very happy to go on oath and say

that I do consider that site to be absolutely



Lonely snow gum, Mt Nelse, Bogong High Plains, Victoria. Photo by Karen Alexander, reproduced from Wilderness Diary 1985.

outstanding and among the best sites, not only in Australia, but in the Pacific region. for its potential and for what it actually contains

'Also for what it symbolizes. It's a tremendous testimony to the human spirit. These are the sort of sentiments that don't sound like "science" and send the Hydro-Electric Commission or politicians "up the wall", but I sincerely believe in such values.

And that's what the World Heritage Convention is all about. Unless our society can make decisions with

concern for such values we will be unable to build a lasting and worthwhile civilization

The book is more than a discussion of values covering as it does a great variety of impressions and experiences. It includes background information on the discovery of Kutikina Cave, accounts of planning for the blockade, insights into the political manoeuvring behind both the destruction of Lake Pedder and the Franklin campaign. From Kevin Kiernan (first

Top-notch climbers rely on MAMMUT ropes



MAMMUT ARO-pro, the superlight UIAA single rope for ambitious climbers. With a new, more compact sheath: Remarkably supple, easy to handle, convenient to take up because of reduced friction (greater resistance to abrasion – less fraying). 6–8 UIAA falls with a rope weight of only 70 g/m.

Now also available with the new and more compact sheath: **ARO-flex** 11 mm single ropes and **ARO-mezzo** 9 mm half ropes.

In addition, MAMMUT is now introducing a new line of tape slings tailored to the needs of sport climbers (new sizes, new colors, security with superpowerful yet supple seams).

MAMMUT Climbing Equipment: For Peak Security Distributors: Australia: Four Seasons Imports Pty Ltd, PO Box 189, East Kew, Victoria 3102, Phone (03) 80 1640 UK: Northern Feather Leisure (UK) Ltd, Menston-likley

USA: Adventure-16, San Diego, CA 92120 SMC, Bellevue, WA 98005



AROVA-MAMMUT

CH-5600 Lenzburg/Switzerland

WILD OCT/NOV/DEC 1984 73

Director of the Tasmanian Wilderness Society) and Peter Thompson (author of Power in Tasmania) comes a conviction which fair takes the breath away: Lake Pedder can still be saved, if drained and carefully revegetated.

My praise, however, is not unqualified. Battle for the Franklin is unattractively presented; it is printed on poor quality paper and the



Wilderness Society Co-Director Karen Alexander. Photo by Geoff Lea, reproduced from Battle for the

photographs are poorly reproduced. Nevertheless, it reveals an inspiring patter of ordinary people fighting for what they know to be important. AS 60b Brown says in the book the saving of the Franklin offers us hope. Looking at the larger issues of our time, that's just what we need.

Australia the Beautiful Wilderness text by Allan Moult, photography by Leo Meier (Wattle Books, 1983, RRP \$38.95).

This large and opulent book seeks to convey the diversity of Australia's wilderness. Although there is a chatty text, the bulk of the book is taken up with a rich variety of coloured photographs, well supported by maps. The authors have set out to visit and record seven areas of Australian wilderness. Washpool, intendinable slagned, Skeadu, Fliggrand Piever Wicholian Septim Seeks (Section, Fliggrand Piever Victoria's Bopong National Park, and Tasmanie's South-west.

The photographs are not all of spectaculiar sunsets (though there are those), but ower a wide variety of subjects such as Ifonal life, birds, animals and landsages. There are even some aerial shots, those of the Simpson Desert providing a stuming tapestry of shape and colour. At times there is a repetition, pages 107 and 131 show shorts of the same surset with the same pandanus tree. Pleasing to the eye they may be, but with a publication like this, one expects originality on every page, and this kind of bunder gives the dangerous impression that

the book is simply being padded out.

In general, the photography works well and shows an original eye, despite the fact that shows an original eye, despite the fact that rather than the rule) in which shots are but arather than the rule) in which shots are but and lack clarity. This is in contrast to the large and lack clarity. This is in contrast to the large of detail on leaves and petals, just what photographic excellence is possible.

However, reproduction of these photographs, though generally good, provides too many examples that are below standard. Far too many are washed out, and this is particularly true of the entire section on Washood, in which subtleties are often lost through excessive contrast or insufficient depth of colour. The results are often pale and unattractive.

In the text, there are occasional tapses in attention detail. For example, the book states on page 262 that the aboriginal inhabitants of tarsamain penetrated in the Southwest perhaps less than 3,000 years ago? There is no source yield your for this remark, for indeed for any of the material in the book), and it is hard to reconcile this statement with the evidence of much older occupation found in Kutikina Cave in South-west Tasmania.

It must have been an ambitious undertaking to set out to cover such large and widely separated areas, and to discover so much about them, in a comparatively short period. This makes the achievement very different from that of say. Peter Dombrovskis, who has steeped himself in his region of interest for a lifetime, and when all is said and done I enlyed it immensely and had no trouble entering into its spirit of celebration of wilderness.

BW

A Field Guide to the Grampians Flora by Rodger Elliot (Algona Publications, revised edition 1984, RRP \$12.95 paperback, \$15.95 hardback).

This is another title in the generally excellent Algona series of regional guide books and maps for use by bushwalkers, tourists and all those who are active in the Australian outdoors.

Rodger Elliot's A Field Guide to the Gramplans Flora is a revised adition of his An Introduction to the Gramplans Flora. This pocket-sized book was first published in 1975 and has been considerably expanded to include a much larger range of plants. As the author to revision, and with his many years of experience and interest in Australian native plants, Elliot's knowledge in this field is to be respected.

My own interest and awareness of the beauty and uniqueness of our native plant life was stimulated by encless forays to the Grampians. It is a delightful destination in all seasons and I have always felt there has been a real need for a well-illustrated laypersor's guide to the flowers and plants of the region. Perhaps my expectations were unrealistic, but to not feel this guide provides an adequate information base for plant identification within an area containing such great floristic diversity as the Grampians.

The author has handled the organization of the subject throughly by dividing It into three main sections alphabetically arranged for ready reference. At the end of each section an identification chart enables a quick keying out of plants. There is also an introduction which gives a biref outline of the Grampians history, and the organization of the Grampians history, and the organization of the Grampians history, which explains how the reader should use the which explains how the reader should use the control of the organization of the orga

The guide also includes colour photographs, individual plant feature sketches and some larger botanical illustrations. Apart from a few exceptions, the photographs are perhaps a little mediocre. The plant feature sketches are a useful identification tool and the larger format botanical illustrations are the graphic highlight of the book. In any botanical illustration is difficult to achieve the necessary balance of informality to indicate the glaratic sides are and growth habit and an aesthetically pleasing illustration.

Despite its good intent there are some important omissions which limit the usefulness of this publication. A major error in any field quide must surely be the failure to include any map of the area concerned. One of the factors listed for plant identification is location, and the Grampians have been divided into ten areas in the identification charts. Plant occurrences at specific sites are also noted in some of the individual species descriptions but there is no plant location map. The earlier publication, An Introduction to the Grampians Flora, contained several detailed maps. Another useful map that might have been included, but is not, is a vegetation area man of the extensive Grampians ranges, indicating the general occurrence of the eight characteristic vegetation types

A number of other inconsistencies detract from the overall value of the book. A scale measurement is normally included in any botanical guide to allow for ready comparison of leaf and flower dimensions, both in the field and for pressed specimens. Similarly, any reasonably sepreneced naturalist or plant lover would expect the particular farmity of each plant to be included in the detailed plant descriptions.

Consequently, A Field Guide to the Grampians Fiora is a disappointing publication. Its graphic style is not terribly adventurous and its text could have been improved by tighter editing and a more thorough assessment of both the reader's needs and the role of a field guide. Francine Gillberdier.

Francine Gilfede

50 Day Walks Near Melbourne by Sandra Bardwell (Anne O'Donovan, third edition, 1984, RRP \$8.95).

Spare a thought for your reviewer. Reviewing track notes is very difficult, even when you have already walked a route. It is only when you have the notes in your hands and ry to use them that you can assess their value. But reviewing the work of a fellow contributing editor (as is Sandra Bardwell) makes things even more difficult. If you are complimentary you are accused of favouritism; if you are critical you might offend your fellow editor.

When I looked at the latest edition of 50 Day Walks Near Melbourne, the diagonal banner on the cover proclaimed: 'RE-WALKED & REVISED'. Pondering this, I turned to the notes on Wilhelmina Falls, which I had found inadequate on a previous trip. The notes had been vastly improved, and the sketch man included several details omitted from the previous edition. To my tidy mind, however, there still seemed too many loose ends. In one case, an easily-missed turn-off is not described: in another. (I think because the track has been relocated), one is told to turn left when in fact it is necessary to turn right. For the alert walker these details will not cause problems, but for others they may lead to some 'geographical embarrassment' Notes for more straightforward walks, as

those for Mt Juliet, or Sherbrooke Forest, have required virtually no changes from the previous edition, and they are quite adequate.

The real strength of a book like this is the way

it gives new ideas. Bardwell has avoided some areas near when when he are already areas near such as the Calbourne which are already propulated, such as the Calbourne which might be overslooked because they seem too popular, such as because they seem too popular, such as Sherbrooke Forest. There is also an index with walks classified for the seasons, core degrees on the control of the type of the seasons, core degrees on the control of the type of the seasons, core degrees of the control of the type of the seasons, core degrees of the control of the type of the seasons, core degrees of the control of the type of the seasons.

You won't always (find this book (or, for that matter, any set of track notes) completely accurate, and you will have to think when you use it. But, doing the best I can to review this attractive and handy book, it remains to be said that there really is no better collection of track notes for day walks near Melbourne.

Back Door Ballads cassette by Stephen Whiteside (1984; available by mail order from PO Box 42, Glen Iris, Victoria 3146, for \$9.00 including postage).

If you're looking for something profound, you won't find it on this tape. But If you enjoy some crazy poetry and toe-tapping songs, Back Door Ballads just might interest you. Most of the material on the tape (six songs and 12 poems) has an Australian flavour, and a love for the bush (particularly the Victorian Alps) is the common thread throughout.

Whiteside works part-lime as a doctor in Port Melbourne, but also performs in music and poetry. He produced the cassette himself, but there is instrumental support from Louis McManus (formerly of the Bushwackers) and sound effects from the ABC. Whilst Stephen Whiteside has written the lyrics, the tunes for the six songs are those of well-known bush ballads.

This cassette is at its best when Whiteside is celebrating the simple pleasures of life, like eating fruit, Mt Donna Buang (near Melbourne) or a day in the bush. His concern for conservation issues is presented in the form of an infectious enjoyment of the outdoors.

There's a Frog in My Stomach by Michael J Tyler (Collins, 1984, RRP \$5,95).

Most readers will be familiar with frogs. Most will also be familiar with their life history which goes somewhat thus: fertilized eggs are laid in some pond or puddle, and the developing tadpoles are left to fend for themselves as they metamorphose into adult frogs. Well, that's not always the case.

aweys the case.

In this entertaining little book Dr Michael Tyler of Adelaide University points out a number of Adelaide University points out a number of adelaided University points out a number of adelaided to the control of the

This quite fascinating piece of fauna is of more than theoretical interest to zoologists. Because of the obvious need to suppress the flow of digestive juices during the course of the pregnancy, the frog has attracted quite a lot of attention from researchers looking for a cure for gastric ulcers. This illustrates yet another reason why our rainforests should be guarded with care: we need to maintain a diversity of species.

There's a Frog in My Stomach is a book for the non-specialist reader who wishes to know a bit more about one of the inhabitants of the



ITION	1984
CENTRE	
ohoto Glenn	Tempest

The **MEI AIRFLEX**suspension is a significant advance in internal frame suspension comfort and adjustability. The leno mesh back

and adjustability. The leno mesh bac provides air circulation and flexes with the frame to cushion the load.



The Chino Clipper (pictured) is perfect for travelling and bushwalking. Made from urethane-coated Cordura®, this front-opening travel pack features a flap to cover its RIRFLEX suspension, a detachable day pack compartment, lockable zipper pulls, shoulder strap, carry handle, and a combination open- and closed-cell foam hip-belt.

THE COMFORT PACK YOU HAVE TO TRY TO BELIEVE

Available from all good outdoor shops

GRAMPIANS NATIONAL PARK



\$12.95 (80ft cover) \$15.95 (hard cover)

A Field Guide to the Grampians Flora is a comprehensive and easy-to-foliow guide, specifically designed to enable the Australian native plant enthusiast, whether beginner or experienced naturalist. To gain maximum assistance in flora location and identifications.



The Gramplan Ranges by Road and Track has become a recognised handbook for this unique and fascinating major tourist area of Victoria.



bush. It is generally well illustrated with line diagrams and photographs.

Alan Burns

The Wildlife and Nature Photographer's Field Guide by Michael Freeman (Thomas Nelson Australia, 1984, RRP \$15,95).

This is a new addition to the abundance of photographic instructions and manuals already available

A hard cover, medium sized book, it has been designed for use on field trips (but would be a bit on the heavy side for pack-carrying bushwalkers).

The introduction suggests that nature photography fuses together three skills — the photography fuses together three skills — the ability to see pictures, to handle a camera adjuckly, and to find and approach the subject. Michael Freeman's subjects, more subject. Michael Freeman's subjects, more often than not, are wild and often large and often large and African elephants and lions, a bull moose from African elephants and lions, a bull moose from the northern forests, migrations of wildebeeste and other herd animals, seals in their ice environment or a watrus with long, pointed tusks are just a few of the amazing topics featured.

Obviously, the book is highly specialized for people interested in stalking or photographing from hides. I would not recommend it to absolute beginners but for anyone else it includes excellent general photographic information and has sections on landscape, close-up, underwater and aerial photography, just to name a few.

The chapters — mostly one double page each — unfold an astonishing array of subjects such as map reading, first aid, understanding the weather, dressing for field photography, baiting and luring technique.

A section devoted to animal tracks relates only to the Northern hemisphere. The book has not been written for Australian conditions, but many situations are similar. Most of the photographs (chosen as samples for various topics) had been taken on a series of field trips in Britain, Europe, USA and Asia.

There are stunning images, and Freeman's work has appeared in publications like *Time-Life*, Geo and *The Smithsonian Magazine*. His latest book could be of real help to the serious nature photographer.

Justa Hosel

Emergency/Survival Handbook by Robert E Brown (American Outdoor Safety League, 1981, RRP \$3.10).

Of all the handbooks relating to emergencies and survival, this one (distributed in Australia by Paddy Pallin) gets the points for natty presentation. Very compact, it comes in its own self-sealing plastic bag and has a signal orange cover. In the middle of it is a bright silver sheet of paper, ostensibly for use as a signaling device or to increase the light thrown by a candle. It would be of doubtful value for those purposes, but it does provide a striking effect graphically, and the silver paper is (when new) good enough to be used as a mirror.

The book is so small (45 tiny pages, three of which are blank and several of which contain information which will not be of interest to Australian readers) that it cannot be regarded as anything like as comprehensive as most of the other books available on the subject. Some of the material is out-of-date or inappropriate, such as the information on snake bite which should be ignored.

This book is small enough to pack into a first aid kit, and I will probably do that with it. Nevertheless its usefulness, at best, will be quite limited.

BW

Lake Mountain Ski Trails Map (Algona Publications, 1984, RRP \$1.95).

Lake Mountain has grown to be a very popular ski touring venue for Melbourne snow enthusiasts.

Only 110 kilometres from the city, it is the

Only 110 kilometres from the city, it is the nearest alpine region to Melbourne. The past few years have seen many new marked trails and facilities.

Algona's latest map of the area (1:15,000 scale) features a useful scale, a detailed approach map, and notes on the area.

Cross Country: Hotham-Falls Creek (Algona Publications, 1984, RRP \$1.95) and Davenport-

Publications, 1984, RRP \$1.95) and Davenport-Whisky Flat — JB Plain Ski Trails (Algona Publications, 1984, RRP \$1.95).
These two maps are based on previous

Algona guides to the southern regions of the Bogong High Plains. The former's scale is 1:50,000 and the latter's 1:25,000.

Both maps are of very limited scope, and although very well presented, contain little information which was not available on previous maps.

The maps are both designed for use by ski tourers, and have plenty of detail as to marked trails, contours, vegetation, and other features likely to be encountered.

Lake Tali Karng and Snowy Range (Algona Publications, 1984, RRP \$3.25).

The Snowy Range area, including Lake Tali Karng, has been a region of enduring interest for walkers for many years.

This latest map covers the approach from Purgatory Spur to the south and extends northward as far as Mt Howitt.

The area around Tall Karng itself receives the most detail, and is at the scale of 1:50,000. (The rest of the map is 1:100.000.)

There are notes on the area, as well as suggested walks. The map is in two colours, and includes contours as well as the other topographical features.

Falls Creek-Mt Hotham by David Rowlands (Published by the cartographer, 1984, RRP

I am not aware of David Rowlands having produced any maps before but this is certainly a notable start. In full colour, it features contours, walking tracks, pole lines, and shading showing different types of vegetation and rock outcross.

The scale (1:50,000) is ideal. This map of a prime alpine region will be welcomed by both skiers and hushwalkers

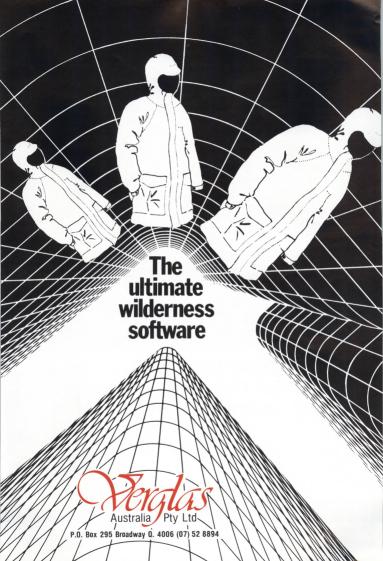
Rowlands claims that the map's major attribute is its accuracy and that all tracks and huts have been checked on foot. He also informs us that there will be another map in the series; the second will cover Mt Bogong to the Falls Creek area and is expected to be available in 1985.

Western Australian Trees Posters by Cliff Winfield (Forests Department of Western Australia, 1984, RRP \$2.50 each or \$10.00 set of five)

These substantial (900 x 700 millimetre) colour posters are well produced on linen paper. 'Depicting the diversity of Western Australia's woodlands and its unique trees' they should appeal to tree lovers throughout Australia.

They are available (postage is extra) from Information Shop, FDWA, PO Box 104, Como, Western Australia 6152.

Chris Rayter





ad Darn Street. Newsattle upon Time Mit 1962 England. Telephone: (1632) 267.561 Brisbane Sooul Outdoor Centre, Jim the Backpacker Sydney Mountain Equipment, Mouritain Equipment mail order, Southern Cross Canberra Paddy Pallin Jindabyne Paddy Pallin Jindabyne Paddy Pallin Melbourne Bush & Mountain Sports, Eastern Mountain Sports, Eastern Mountain Dackpacking, Paddy Pallin Albelader Thor Adventure Paddy Pallin Albelader Thor Adventure Centre Hobart Ton Adventure Centre Hobart Hondown Sport Centre Hondow

Travel packs with 1st. Class style—and versatility!

The latest range of high quality travel packs from Berghaus is the MUSTANG.

These convertible travel packs utilise the unique AB and DELTA carrying systems and are produced in 12 oz. Cordura fabric.

MUSTANG is styled to be clean and compact for easy handling on

airline conveyor bells and yet designed to give high standards of comfort and performance when used as a backpack. Ranging in capacity from 25 to 65 litres, there are four models available in a distinctive navy/silver combination with reflective

stripe.
If your replanning a major trip this year, call and see the MUSTANG range at the specialists stockists (shown left).







10 reasons why
Fairydown's Leading Lite
is the best value for money
sleeping bag



Offset quilting.
Leading Lite features two layers of stitched-through quilting to prevent heat loss. The seams are also offset.

Advanced "Mummy" style design.
Features separate foot compartment and built-in drawstring hood for optimum warmth.

3. Differential cut. The outer shell is cut wider than the inner, so the filling can loft higher.

Contains 150 g/m² layers
of a new generation
ultra lightweight siliconised
hollow fibre. Gives
excellent lofting.
Resists water. Dries
quickly. Still
retains most of
its insulating
qualities
when wet

5 full length side zip opens either end for temperature control. Polyester coil design, light-weight, can't rust or rot. Specially insulated to prevent heat loss.

6 optional
left or right
hand zips for pairing to make
a double sleeping bag. Zips can
be operated from inside or outside.

Outer and lining are top quality

1.6 oz Soft Touch taffeta nylon.

Lightweight and very strong.

8 Total weight is a mere
1.35 kg, yet it is comfort rated to -6° Celsius.

9 Tough, waterproof nylon "Stuff Sac" carry bag, features closure flap, spring loaded toggle tie and grip handle on the bottom for easy removal.

10. The Fairydown label is your guarantee of excellence and quality. Fairydown sleeping bags have been proved from Everest to Antarctica.

Available from all leading Outdoor Equipment Retailers.

DC AFOR

Wild Gear Survey Synthetic Sleeping Bags

Selecting the Right Bag

MANY OUTDOORS PEOPLE HAVE WALKED. climbed, rowed or merely holed up, weatherbound, for days on end without food. Yet to brave the elements for such a period without sleep is much rarer and considerably more taxing - unlike our storing of energy-giving fat, we cannot build up reserves of sleep. But if it is twenty below and blizzarding out on the Main Range or a steamy night up on Cape York, sleep is important.

Such basic considerations make the sleeping bag the most commonly used and arguably the most important item of outdoor equipment. The variety of conditions encountered in Australia is vast, but no more so than the camping and sleeping nabits of Australian outdoor enthusiasts. You, the

consumer, best know your requirements. With adequate guidance (through the murky waters of

materials and ratings, and the claims and counterclaims of advertisers and catalogue writers) you will Our initial stance in this review is that it is not so much that there are good bags and bad bags be well placed to choose the right bag for vourself

but that, given conditions of use, sleeping habits and budget, any bag might be the most suitable for particular user.

Human beings are endotherms (warm blooded) and have automatic reactions to regulate body emperature. At the body core — the vital organs of trunk and head — that temperature must never vary much from 37°C; only a few degrees up or down will cause heatstroke or hypothermia.

To prevent or reduce heat loss, insulation is placed between skin and environment.

From prehistoric times man has come to prize various insulating materials for the warmth they afford. Examination of these traditional insulators shows that they disrupt the establishment of convection currents by partitioning the insulating ayer into air cells so small that they would heat uniformly enough for currents not to arise — hence he name 'dead air'. (Convection currents have been detected in air cells as small as two millimetres in diameter.) In addition, a very thin layer of 'boundary air' is trapped at the surface of each insulating fibre by molecular attraction or friction. Such air is almost immovable, resisting even the 'bellowsoump' action that expels normal dead air when the nsulating layers are moved. It also resists conductive heat transfer from insulating fibres hrough to the remainder of the trapped air.

Surprisingly, however, the material out of which the insulation is made (wool, down or even steel wool) makes little difference to the effectiveness of the insulation provided that the fibres are not compressed beyond a bulk density that would

itself. The insulating material should be dense hat are as small as possible without being so The point is that dead air does the work, and dead air will be maximized through the physical configuration of the material and not the material enough to divide the insulating volume into air cells dense as to promote conduction, and the surface area within the insulation should be as large as promote heat transfer by conduction.

the compression the greater the loss.) Barring The 'puffy' lofting ability of down means that it will mould more closely to the shape of the body and thus ensure greater efficiency. Against this, the

accidents, the effective life of a down bag will be

wo to four times longer.

single (though by no means conclusive) guide to the potential warmth of a sleeping bag is the proportional to the thickness of dead air. Despite provisos about density and surface area, the best, thickness, or loft, of the insulating layer. Of course, this needs to be balanced against the individual's ability to produce heat.

be placed as close to the skin as possible, as even small gaps leave space for convection currents to around the body as possible - any thinning of the of thermal insulation. First, the insulation should develop and leave space for untrapped air. Even small movements can pump untrapped air out of the insulation taking valuable heat with it. Second, the insulation should be as evenly-distributed ayer may mean that heat equilibrium is not reached One bad cold spot could rob the bag of an effective in that area and heat loss, or 'cold spots' will occur

Down or synthetic? Down has long been the penchmark for insulations, but many practical The weight of down required to completely fill a given insulating volume will be smaller than for any other material. The resulting sleeping bag will be more compact when compressed — weight and weather the hardy could possibly dispense with insulation under body weight. As for the packed size, the first two lines in the bushwalker's anthem, An equivalent synthetic bag would average 30-40% neavier and be at least two and a half or three times arger in volume in the stuff sack. However, in warm synthetic fills will retain bulk and reasonable their sleeping mats and save a little weight

stuff sack to reduce bulk by up to 40%.

possible

As a rule of thumb, thermal insulation

advantages and an enticing set of minor strings to heir bow. Of the latter, all the synthetics are nonare substantially easier to clean. Down definitely attention - if you don't have the personality to be a little obsessive about it, a synthetic bag might well The two big pluses for synthetic bags are performance in wet conditions, and price. Delicate water though the insulating layer. If saturated, the allergic, will not support mould or mildew, do not ose fill or loft following damage to the shell and equires more protection and more care and down tendrils cannot support the weight of water extremely absorbent, the down will tend to 'wick' pag will have no insulation value - all these and will lose loft quickly with little moisture. be your best choice. Two further factors will influence the efficiency

he remedy is to cover the bag with a waterproof n the course of a night we transpire and exhale difficulties being compounded by very slow drying; at least two warm fine days following saturation. shell but the shell must also be breathable because nore than sufficient moisture to significantly affect he performance of the bag through vapour considerations could persuade the modern outdoors person to opt for synthetic insulations.

not to suspend water between fibres in the fill. Even absorbent and because of their slick surfaces tend when saturated, a synthetic bag can be wrung out and will provide some insulation, especially if you and for most people's requirements such expense In contrast, the synthetic fibres are virtually noncan dry off and get into your waterproofs before s not warranted.

getting back into the bag. Conduction by water is he major form of heat loss in a wet bag, and unless you can take the above steps the night will be singularly uncomfortable irrespective of laboratory esults. In this respect the major advantage of a synthetic bag is the ability to withstand reduced loft rom the condensation of transpired and exhaled size, there is the option of using a tele-compression n that it can repeatedly re-loft to maximum every compression a bag will lose loft. (The greater Down has greater resiliance than synthetic fills ollowing compression. By comparison, synthetic ibres matt and displace - with every use and

In USA, synthetic bags have a much larger share of the specialist 'backpacking' market than they do n Australia - price is the main reason, Australian and New Zealand synthetic sleeping bag unsophisticated designs and construction methods - they produce quite good quality bags to mid bags available in Australia are American-made and manufacturers have stuck with relatively hree-season ratings at very good prices. However, o keep weight and bulk within bounds for three/ our- and four-season bags, more advanced echniques are required. In general, the only such elatively expensive because of exchange rates and noisture and to dry quickly in the morning.

> stiffer synthetic fills are less likely to yield cold Its lightness, relative mobility of insulation and petter drape usually means that a down bag will On the other hand, synthetic fills have two big

spots,

nave a wider effective temperature range.

and polyester fibres are still used in two- and low now used in quality synthetic bags are the hollow ibres Hollofil, Quallofil, and the solid fibre Polarquard. A few other unspecified hollow polyesters are being used in bags of generally good ills will be reasonably efficient. However, if hard echnical data is not openly provided one is left in he position of having to trust the reputation and Synthetic insulation. A variety of solid acrylic hree-season bags but the main three materials quality, and there is little doubt that, thermally, these pronouncements of the manufacturer. moort costs

centimetre long, fine threads) with holes running naving a peaked and Quallofil a rounded wave to resist displacement and clumping. Lately, the Hollofil and Quallofil are short-staple fibres meaning that they come in individual, five ongitudinally through each fibre, one in Hollofil, four n Quallofil, Both are crimped (like hair), Hollofil pattern. Though the staples are separate pieces hey must be fashioned into flat, manageable batts bres have been lubricated, usually with silicon.

condensing inside the shell, Unfortunately, the

available waterproof/breathable fabrics are costly

The principal value of hollow fibres is their warmth for less weight. Both crimping and nstead of just one, and its functionally superior wave-like crimp, Quallofil has been measured as decreased weight rather than the extra trapped air; hus compared to solid filaments they provide equal ubricating increase initial loft and re-lofting ability. and resist clumping. Because of its four holes,

2,000 g 1,950 g 2,100 2,100 2,700 2,700							2000	907		Mone	fabric	dimensions	buce
	Sewn through	цвпа	Holloffi, 1 layer	Pactangular	190 cm	75 cm	Optional,	Full length, single-ended	Small 2D	Nylon 19 or	Cotton	28 × 40 cm	8
	Offset quifted	lihed	Hotofil, 2 layers	Rectangular	8	75		Full length, single-ended	Small 2D	Nylon 1.9 oz	Cotton	25 x 45	¥
	Differen	Differential cut, offser quifted	Polarguard	Mummy	18	7.2	Flat rectangular, uninsulated wind collar	160 cm side	Simple 3D	Taffeta	Thion	25 × 46 (bag) \$ 15 × 40 (mande)	2) \$248 mle)
2200 2,000	Offset quilbed	pagin	Polarguard, upper—3 layers, base—2 layers	Mummy	55	57	Flat semi-circular, insulated mutt	W side, double-ended	Simple 3D	Nyion	Cambric	26 × 45	\$135
1,700	Offset	Offset quifted with RHB	Hollott, upper—2 layers, bass—1 layer and RHB	Mummy	8	20	Flat semi-circular	160 cm side, double-ended	Large 2D, offset	Nylon 1.9 oz	Nylon 1,9 oz	22 × 32	\$189
1,720 2,000	Offset quitted	ilted	Urspecified hollow polyester, 2 layers	Sightly tapered 186 rectangular	d 186	8	Flat semi-circular, sewn through at attachment	Full length double-ended	8	Rip-stop nylon	Rip-stop nylon	26 × 42	\$83
1,300 1,650	Differen	Differential cut, offset quilted	Unspecified hollow polyester, 2 layers	Mummy	571	E	Shaped semi-circular, sawn through at attachment	W side, doulbe-ended	Offset 2D	Rip-stop mylon, 1.5 c	Rip-stop Rip-stop 2 mylon, 1.5 az mylon, 1.5 az	26 × 40	\$154
1,680 1,650	Upper	Upper-box waited Bass-offset quitted	Upper—400 g 95% down Base—as for Leading Life	Mummy	EE .	2	Shaped semi-circular, sewn through at attachment	W side, double-ended	3D, down- filled	Rip-stop nylon, 1.9 c	Rip-stop Rip-stop 7 mylon, 1.9 az mylon, 1.9 az	26 × 40	\$199
1,875 1,900	Ollsel	Ollset quitted, with floating, edge-stabilized middle layer and RHB	Oualoff with RHB	Митту	190	8	Oupped semi-circular, insulated muff	W side	Offset 2D	Antron	Anthon	22 × 42	\$255
2,440 2,750	As for N	As for Minaret but with heavier floating layer	Oualiciti with RHB	Митту	190	8	Oupped semi-circular, insulated muff	% side	Offset 2D	Antron	Antion	26 × 46	\$286
1,480 1,520	Differen	Differential cut, ½ overlapping shingle	Polarguard	Митту	180	22	Oupped semi-circular	175 cm side	Offset 20	Luscious	Luscious	20 × 45	\$220
0691 0691	As for C	As for Cat's Meow, but with RHB	Polarguard, betts fined with RHB	Митту	180	25	Oupped semi-circular	175 cm side	Others 2D	Luscious	Luscious	20 × 45	0525
2,200 2,280	Differen	Differential cut, % overlapping single	Polarguard	Митту	185	28	Oupped semiciroular	175 cm side	Simple 3D	Luscious nyton	Luscious	28 × 53	\$280
1,650	Sewn through	yôno	Holloff, 1 layer	Flat-cut tutp	172	88	Flat semi-circular	Full length, double-ended	02	Nyfon	Cotton	22 × 40	\$118
1,850	Offset quilted	pequ	Holloff, 2 layers	Mummy	98	08	Flat semi-circular	160 cm side double-ended	Large 20.	Rip-stop	Ripetop Ripetop	24 × 41	\$165
					1								
0001	Single	Single layer sewn to outer, seamless inner	Holott, I siyer	несандиаг	1/8	9	rial sem-circular	double-ended	euon	rylon, 1.9 oz	Comon S	24 × 82	20%
2,100	Offset quilted	bed	Hotoff, 2 layers	Rectangular	85	2	Fiat semi-circular	2 zips, both double-ended	Small 20	Rip-stop C. nylon, 1.9 oz	Comon	24 × 45	888
000'1 006'1	Sewn through	ugh	Holoffi, 1 layer	Rectangular	Ħ	8	None	Full Length	None	Taffeta	Flarnel	27 × 40	\$82
2300 2200	Oullied,	Quilled, 2 layers not offset	Holoft, 2 layers	Rectangular	171	8	Optional, flat semi-circular	Full length	Small 2D	Taffets ryfon	Cotton	22 × 50	888
1,600	Sewn through	ų bro	Holoffi, 1 løyer	Rectangular	180	8	Optional, flat semi-circular	Full length	None	Rip-stop m/lon	Cotton	22 × 45	88
1,900	Outhed,	Outhed, 2 layers not offset	Holloffi, 2 layers	Rectangular	185	£	Slightly shaped, serti-dircular	Full length	Small 20	Rip-stop nyton	Cotton	22 × 45	88
1,550 1,700	Outlied middle	Quited outer layers, floating, edge-stabilized middle layer	Polarguand, upper—3 layers, base—2 layers	Mummy	185	2	Flat semi-circular	34 side, double-ended	Large 3D	Talleta milon, 1.7 o	Talleta Taffeta 2 mylon, 1.7 oz mylon, 1.7 oz	28 × 45	\$248
2,100 2,200	Outbed middle L	Quilbid outer layers, floating, edge-stabilized middle layer	Polarguard, upper—3 layers, base—3 layers	Mummy	185	2	Flat semi-circular	14 side, double-ended	Large 3D	Talfeta mylon, 1.7 c	Taffeta Taffeta nylon, 1.7 oz nylon, 1.7 oz	28 × 48	\$280

-8% more efficient thermally and slightly more ibres approach some of the characteristics of down good loft, a soft feel and relative ease of In comparison, Polarguard is a continuous lament, solid polyester fibre also laid down in batts. softness and loft when compared with the earlier, ofty than an equivalent weight of Hollofil. Both stuffing. Again Quallofil's crimp makes it superior. t too, of late, has been siliconized to improve its stiffer, flatter, resined batts.

When new, Polarguard has appreciably less loft han the short-staple fibres but only a slightly lower continuous filament it has a greater resistance to displacement and clumping, has no crimp to lose or flatten and, because it is more stable and manageable, requires less stitching in manufacture, Consequently, Polarquard will retain its loft better. s more durable and has a slight price advantage hermal efficiency for weight. However, as n construction.

Note that because of batting methods and the In summary, the slight differences would seem o balance out.

addition of resin and/or silicon, weight variation of convective heat loss, and in the past manufacturers nad no way of increasing the warmth of their bags except by adding more layers of fill. The consequent weight and bulk has helped shift some attention to New innovations. As with down, the focus of he above synthetics has been the minimization of olus or minus 10% can occur in synthetic fills. he less significant forms of heat loss.

Radiant Heat Barriers (RHB) - thin shiny naterials similar to a space blanket - work by nstead of letting it escape through the bag. Even hough most insulations are dense enough to neated in consequence, will re-radiate — and so on, until radiation escapes from the bag. Tests ndicate that a RHB sewn behind the bag's inner ning will add 5%-7% to the bag's rating. A sleeping bag with a RHB will be slightly lighter and substantially less bulky than a bag without a RHB eflecting the body's radiant heat back at vou ntercept these rays, the intercepting fibre, slightly and of equivalent warmth.

without stitch holes is vapour proof. They work by clothing to avoid contact with the clammy nylon genuinely sub-zero before a VBL can be used in Vapour Barrier Linings (VBL) — generally this s a waterproof nylon inner bag, although a RHB rapping transpired moisture within the bag, raising the humidity until the skin is moist enough for transpiration to cease. A VBL will add 7º-10ºC to a pad's rating. It is essential to wear a full layer of thermal underwear is best. However, in our experience the ambient temperature must be

Design and construction, Irrespective of the hickness and combination of the various

design and construction of a bag we are concerned with the evenness of the insulating layer and its nsulations mentioned above, in assessing the proximity to the body.

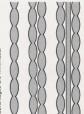
degrees (approximately 5°C) more efficient than a particularly if it is differentially cut. Clearly the venting of untrapped air. The tighter the fit, the more efficient the bag — needing only to be balanced against comfort. Box feet (three-dimensional in construction) and differential cut (a shorter inner Shape. Box-footed 'mummy' bags will be several mummy shape contours closer to the body and will minimize internal convective currents and the shell than outer shell) both serve to minimize the possibility of cold spots caused by the compression General construction. Sewn-through llat-cut, rectangular or semi-rectangular bag

simultaneously to the insulating layer(s) - results on each line of stitching. Increased spacing of the of the insulating layer from pressure inside the bag. construction - inner and outer shells sewn in compression of the insulation to virtually no loft

Off-set quilting comprises two sewn-through and off-set layers. The idea behind this construction is to line up a cold spot in one layer with the thickest stitching will initially provide more consistent loft, but reduced stability of the insulating layer(s) will ead more quickly to displacement and clumping nsulation on the other. Slippage between the layers and, hence, further cold spots.

can line up cold spots and cause displacement and

Stabilized off-set quilting is similar to off-set quilting, but the layers are attached on either the side opposite the zip or through mid-points of the ayers or both. Slippage and the consequent disadvantages are minimized.



zip, hang-loops, Velcro to position draft tube, extra and a bag that can be zipped to another to form arge storage bag, pillow and/or storage pockets, a double bag. -rom top to bottom; sewn-through, off-set quilting, off-set

of similar age and fitness. Draw on their Decide on both the coldest conditions and the range of conditions you want the had to cover. experiences and assess their sleeping bags. Establish a realistic budget

particularly those of the same sex and preferably

Having done your homework and established although they are useful for comparing bags in a ange. Assess the bags yourself, concentrating on off and the factors which will ensure its even priorities, study the available bags at the various retail outlets. Disregard temperature ratings as an objective guide (despite the usual caveat about ndividual variation almost all are overstated) Determine secondary priorities like weight, distribution and efficiency - draft tube, hood packed size and shape.

Staying warm. A full length, pressure-blown (not chemically-blown) closed cell foam mat, or selfinflating mat, is essential. Even so, try to locate your sleeping site over dry, non-conductive, organic naterial or failing that, aerated, sandy soil. If on one trip you notice heat loss to the ground get a Once a model is selected, check the particular pag carefully — its weight, loft, stitching and so on. petter mat or a second one.

he liver distributing nutrients, will ensure good heat production through the night. Exercise briefly before etiring to get skin temperature up - the bag will Eat a good meal, high in carbohydrate, just pefore bedding down — a high metabolic rate, with

etain the heat, the insulating layer heating more uickly.

Extra clothing can be added as needed but the particularly as the nose and mouth should not be Bellows action can pump hot air from the head nands, feet and head should always be covered. he greatest potential heat loss is through the head, covered - condensation problems can result so a good, thick Balaclava is essential.

of the bag, so tuck the bag closely around the body, close the hood well up over the forehead, drape a bulky, dry item of clothing around the neck to seal he head of the bag and sleep as still as possible. You may also try experimenting with radiant andlor vapour barriers.

Care and cleaning. Most important in the care of a bag is to compress it as little as practicable - store hanging (best) or fully lofted in a large container, in a cool, dry place. When walking, the bag should be aired every morning and should ilways be the last thing packed and the first inpacked. Let the stuff sack be as large as possible. Wash in pure, non-detergent soap. While nachine washing and tumble drying is possible. and washing and drip drying will subject the bag

coverage, but stabilization of the floating layer(s) Other more sophisticated constructions proliferate, attempting to maximize loft and stability while minimizing the possibility of cold spots. is essential to prevent clumping.

Off-set quiliting with central laver(s) gives good

repairing and unlikely to rip snagged fabric — are preferable. Double-ended zips give greater versatility in venting and are preferred. Shorter zips Draft tubes are essential to cover zippers. The ollowing constructions are described in ascending order of efficiency — the plumper the tube and the Zips. Continuous-coil nylon zippers - selfgive better consistent loft but reduce versatility.

Off-set two-dimensional. If pushed against the rip, the thickest part of the tube will provide quite fwo-dimensional can be either quilted or not. ewer the sewn-through lines the better. Always sewn-through at base.

shape and potential cold spots.

noisillation

rom left to right; two-dimensional, off-set twodimensional, simple three-dimensional and threedimensional draft tubes.

Simple three-dimensional is very good, although Three-dimensional is best. Its erect, proud profile contact with the zip is not ensured. provides the most efficient seal.

hand. Gone are the days when all nylons had a strongest most durable fabric with the best feel or silk-weave nylons fill all criteria. Cottons are heavy and will deteriorate but, if preferred, an inner sheet Shell fabrics. The optimum is the lightest. slick, clammy feel - modern, high thread-count,

particularly in combination with a muff or wind synthetic bags, compensating for loose, inefficient anough - the only real test is to get inside and Hood and muff. A well-shaped hood. collar can overcome the stiff, open nature of it. Flat-cut hoods alone will generally not close well s the best option.

Features. Minor but useful additions are almost

some of the following may well tip the scales in too numerous to cover although a combination of avour of one bag over another. Velcro closure on

Buying a bag. Try to establish how warm you sleep by comparison with camping friends.

guilting with central layer and shingle construction.

 less fibre-matting, stitch-stretching abrasion. Macgregor Stewart and Anthony Hardy



lan Aitchison and Co Pty Ltd 42 Douglas Street Milton Qld 4064



lan Aitchison and Co Pty Ltd 42 Douglas Street Milton Queensland 4064 Phone (07) 369 0965

THREE PEAKS

QUALITY GEAR AT HEAVILY DISCOUNTED PRICES

- · Bushwalking
- Trekking
- ·Camping



We will ship to anywhere in Australia and the South Pacific. Fast Service. Write or phone for a FREE price list. PO Box 4661 Sydney NSW 2001. Retail showroom 49 Ramsay Street, Haberfield NSW 2045 (02) 797 0233

JIM #Backpacker 77 Queen Street Brisbane Qld 4000 Specialist Outfitter

for Trekking and Overland Travel



Day Packs size I, 20 I, \$25 size II, 27 I, \$30

Taped internal seams and waist belt.
 Shoulder harness reinforced with

leather patch and rivets.

3. Available in plain nylon; yellow, red or Cordura; navy, grey, khaki.

Postage \$2. Buy 2 packs post free. Buy 10 packs and get one pack free. Valid till Nov 1984. Trade enquiries welcome.

SEW THEM YOURSELF AND SAVE



Rain Parka and Overpants Splash Jackets Pile Jackets Breeches Gaiters Water Bag Bum Bag Day Pack

Sizes from 2 years to adult Write for information to OUTDOOR WEAR PO Box 783, Cooma, 2630

Equipment



Australia, inflatable canoes are becoming more widely available. The Narwhal Totem T350, a two-person canoe (distributed by Wild Country, RRP \$620) is a surprisingly good performer in up to grade three water. As it is basically an open canoe, it is liable to swamping in big water.

The T350 is made from Onks, a new material made from a polyester material base coaded with PVC on both sides. The manufacturer says that with the use of Onks, coupled with the yeve high standard of welding and vulcanizing, the T350 is extremely strong, durable and safe. The cances appearance, and its performance when the tested recently, would apose to bear this out.

The T350, with a foot pump, instruction manual and repair kit comes in a handy carry bag, total weight about nine kilograms, which is easy to transport in the boot of a car. The inflatable seats are an unusual design, and lend themselves to a number of shapes and positions!

Overall, the T350 is a lively performer in white water and comfortable and easy to handle on flat water.

Yvonne McLaughlin

• Blow Ups. With more people rafting wild rivers, there is a corresponding increased interest in inflatable rafts. For those wanting something better and longer lasting than the two- or four-person Taiwanese variety, the German Metzeler inflatables are distributed by Waves Overseas.

One advantage of the Metzeler is that, even with one of its four major air tubes deflated, the raft remains manoeuvrable — great if you have a puncture. Also, the inflatable floor protects the rafter's bottom from impact, insulates it from the cold and gives the raft longitudinal directional stability.

The main drawback is the high cost, but used over a number of trips even the economics are Metzeler Juca on the Kowmung River, Blue Mountains, New South Wales and, below, Narwhal Totem T350 inflatable canoe.

more attractive. Prices range from \$830 for the two-person **Jolly S**, \$2,350 for the four-person **Juca S** and up to \$4,400 for the massive seven-person **Mammut**. Metzeler also makes inflatable canoes which have been used to descend major rivers including the Franklin.



• Tough Kayaks. Cross-linked polyethylene is strong, and kayaks made from it are a lot more durable than those made from conventional fibreglass. When Current Craft Australia started importing the polyethylene Intruda from New Zealand it was breaking new ground (as reported in Wild no 9). Now another plastic kayak, the Olympia, is available from Current

THE SUPERIOR FIBREPILE

the people who developed fibrepile

Why Helly-Hansen FIBREPILE is better. Fibrepile maintains a still layer of air around you which keeps you warm. Helly-Hansen FIBREPILE is made from spun your double anchored in its backing. This unique and secure Wpile knitting technique makes Helly-Hansen FIBREPILE exceptionally hard-wearing.

and enables the use of more pliable fibres that are soft to feel and less likely to 'pill'. Because no coating is necessary to fasten the fibres to the backing. Helly-Hansen FIBREPILE is

Usual knitting technique (left) requires coating to reduce pilling. Helily-Hansen W-pile (right); double anchored spun yarn.

soft, flexible, compactable, body-hugging and free-moving; in a word, comfortable, Helly-Hansen comfort. Helly-Hansen is soft and can be worn next to the skin or over light underwear such as Helly-Hansen LIFA SUPER. Made from firstes that do not absorb moistinet, Helly-Hansen LIFA SUPER transport perspiration away from your body so it can evaporate without causing any significant loss of body heat. You stay warm and dry. Wear fibrepile beneath wind or waterproof outer clothing and you are well protected from all conditions. Helly-Hansen FIBREPILE is machine washable and fast drying. Clothing could

LIFA SUPER FIBREPILE



from



Untrekked trails, wild rafting and Royal **Bengal Tiger!**

Trek the world's highest peaks, and meet the people and exotic cultures of Nepal. Dense jungles, wild rivers, great snow peaks which reach for the sky, fabulous iger and rhinoceros - Nepal has all of the ingredients for intoxicating adventure. By foot, by raft, or by elephant safari, Nepal is an adventurer's



Ring now for free colour

uite 710, 7th Flr., 343 Lt. Collins St., lelbourne, Tel. (03) 60 1121, 60 1122

PEREGRINE EXPEDITIONS



If it is hiking, climbing, rafting or camping in Tasmania your one stop shop is:

THE JOLLY SWAGMAN

Hobart 7000 Tasmania Phone (002) 34 3680

Craft Australia in Victoria and Leisure Coast Canoe Services in New South Wales

The Olympia appeals to the serious white water canoeist. It features lines similar to the 76 Olymp, a three-position adjustable seat and good foot room through an open-pillar system. The current price is \$595, but this may be reduced due to the New Zealand devaluation announced in July

· Packs. Karrimor continues to update its pack range. The successful Jaquar internalframe packs now boast the Self Adjust System harness (SAS 1). This is similar to the Condor system (SAS 11, reported in Wild nos 12 and 13) except that the Jaquar does not have the Condor's adjustable hip belt. Two models are available the Super (RRP approximately \$200) and the Economy (RRP approximately \$120)

The Lynx series has had a price decrease. All four sizes are under \$100

Thoughtful design is a feature of the new Karrimor Spindrift day packs. There are internal key-ring clips, vacuum flask pockets and goggle pouches, external pockets and glove clips. Especially suitable for day walking and ski touring, the Spindrift day packs come in a range of sizes with varying feature combinations. Prices range between \$11 and \$42

In addition, the new Karrimor On-Off day packs are designed for specific applications and include a cyclist's pack with a bicvcle pump ecabbard

Jim the Backpacker has introduced two models of day pack. Teardrop in shape, they have a top zip, front pocket and waist strap, but no back padding. The seams are well constructed. Good value at \$25 for the 20 litre model and \$30 for the 27 litre model

. Underwear, Most people would agree that polypropylene underwear is excellent. It is light, stretchy, warm and wicks away body moisture.

A new brand to appear on the market is Everwarm, imported by Skima Imports Australia. It is made in New Zealand from Italian Merakion fabric which, unlike some other polypropylene fabrics, is 100% polypropylene. We tried Everwarm long johns and found them excellent, although they were shorter in the leg and bigger in the waist than the equivalent sized Helly-Hansen Lifa. Does this say something about the physique of the average Kiwi? Long johns and round-neck, long-sleeved shirts sell for \$29.50 each.

Silk underwear is also available. This heautiful natural fibre has properties remarkably similar to the new synthetics. Made in China for Karrimor, shirts and long johns sell for about \$50 each. Balaclavas are also available for \$9.50

. Suckers. USA certainly is the home of gadgetry, at least when it comes to outdoors equipment. One gadget from USA which could be useful in those parts of Australia where water quality is questionable, is the Pocket Purifier. Weighing only 30 grams, this tubular-shaped device is 20 centimetres long and five a resin clean the water simply by the user sucking water through it. It is claimed that the Pocket Purifier has been used on raw municipal sewage and stagnant pond water, providing good tasting, microbiologically potable water!

Not suitable for use with salty or brackish water, it should be noted that there are small quantities of iodine in the treated water, so pregnant women and people with thyroid problems should consult their doctor before drinking it. The volume of water it will clean depends on the water quality. This can vary from



School and other groups by arrangemen

Week-end courses cover n abseiling, all aspects of safety and plenty of

rampian

Enjoy walking in Victoria's newest and largest National Park. Everything provided. No heavy pack to carry.

Musbury PO Box 37 Halls Gap 3381 (053) 56 4300

METZELER Better By Design.



Dinghies, Sports boats. Canoes, River boats. Models with Sailing Gear.

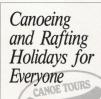
WAVES OVERSEAS Pty Ltd 142a Victoria Road, Gladesvil NSW 2111, Tel (02) 817 1309/1333

I want to put a Boat in my Boot! Please send me more information

Name Address

Postcode

Telephone



Canoe Tours Australia specializes in river-running holidays. Join us for a marvellous experience on one or more of Australia's mainland rivers.

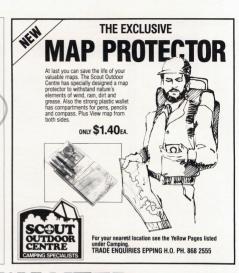
AUSTRALIA

We provide everything you need for a hassle-free holiday.

For brochures and bookings: Canoe Tours Australia Pty Ltd, 8 Barton Court, Bourke Street,

Barton, ACT 2600 Telephone: (062) 73 3983





WANTED

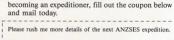
Scientific Leaders • Young Expeditioners

In January 1985 you could be a member of a group of scientists and young expeditioners (17-23 years) who will take off for five weeks of solid adventure and scientific exploration.

The expedition will survey Hinchinbrook Island off the north Queensland coast.

The environment will be tropical. The conditions hard going. Hinchinbrook Island is a treasure chest of scientific discovery. Excellent opportunities exist for unique seasonal studies of the flora and fauna.

If you feel you have the qualifications necessary to be a scientific leader, or are interested in



Name	Age
	1480
Address	
	Postcode
Phone Home	Work

Post immediately to: The Australian and New Zealand Scientific Exploration Society, PO Box 174, Albert Park, Victoria 3206.



ANZSES is sponsored by TAA







When you really want to ski... Cross Country equipment Clothing and Accessories from



74 Clarence Street, Sydney. Telephone: (02) 29 7792 as little as one litre for really dirty water to 450 litres for clear but biologically contaminated water. When it reaches its capacity, the Pocket Purifier becomes clogged. Imported by Outdoor Survival, it has a RRP of \$14.40.

 Orienteer's Compass. The Suunto Norcompass, which was used very successfully in the 1983 World Orienteering Championships, is now available in Australia. (Distributed by Outdoor Survival, RRP \$24.50.)
The Norcompass has a fixed compass housing



Suunto Norcompass

and no calibrations, so it is not suitable for bushwalking. For use in orienteering, the map needs to be folded and the compass held in position on the map while the user runs or walks. The Norcompass has a non-slip rubber oad and thumb strap to facilitate this.

• Gore-Re. Jacket. The main disadvantage with Gore-Re is thing hore. Paddy Pallin has introduced a budget-priced Gore-Re; Jacket called the Gold. At 599 it can hardly be called cheap, but compared with other Gore-Re. Jacket is the good value. For those who don't know. Gore-Re has the twin advantages of waterproofing and breathability. The Gold has violationally designed to the control of the Gore-Re has the twin advantages of waterproofing and breathability. The Gold has violationally designed to the control of the Gold has been designed and the Gold has been designed as the Gold has be

• Roof Rack. The Swedish Athlet car roof rack is notable for its versatility. Accessories make the rack suitable for carrying skis, canes, bloycles, windsverfers or luggage. Caravian spolies are even available. Of interest to people carrying expensive equipment, there are locks for securing both the rack to the roof of the control of the control

 Case Study. Available from Scout Outdoor Centres is a good value map case. Much better than a plastic bag, it has spaces for pencil, compass and, most importantly, maps. At \$1.40 you won't be frightened of throwing it out when you need a new one.

 Climbing Equipment. Perhaps as belated acknowledgement of this unusually equipmentoriented and rapidly-growing sport, the Australian market is experiencing a flood of imported climbing gear.

From **Aspiring Enterprises**, New Zealand, comes what, at 300 grams, is probably the lightest **harness** on the market. (No karabiner is required.) At a RRP of only \$39.60 (not \$48.60



Specialists for Bushwalking Climbing and Cross Country Skiing 204 La Trobe Street Melbourne 3000 Ph (03) 662 3349



Maxwells Cradle Mountain Lake St Clair Bus and Taxi Service

★Transport between Launceston, Devonport, Burrie and Il Bramanian wildernes saras inducing Cradlen Mountain, Lake St Clair, Walls of Crasulan, Pracchamas Cap, Ann Rive, Wolfrom Mine, Lake McKenzie, Higgs Track, Lake Augusta, Franklin River-Strahan. *24-bout charter service anywhere in Tasmania. ±14 vehicles, 51 o.49 seats. *20 years of service to bushwalters. *Shedlite, metho and Gaz available. *Special summer (Deselb) bus service beween Lake St Clair and Derwent Bridge to meet the Redline Bus twice daily and take people for hotel means nightly.

*Book a Cradle Mountain and Lake St Clair return flight (Ansett) and bus package from Melbourne \$182.90, Sydney \$252.50 or Adelaide \$288.30. (Parties of three or less slightly more.)

Maxwells Wilmot Tasmania 7310 Phone (004) 92 1431 Devonport (004) 24 3628



Mountain Stage Line provides transport to Tasmanian wilderness areas for huchwalkere

Mountain Stage Line is based in Launceston which, for interstate bushwalkers (arriving and departing Tasmania), is centrally located to most wilderness areas.

For seven years Mountain Stage Line has professionally transported skiers to Ben Lomond National Park. In 1982 the business expanded to provide a much needed alternative service for interstate bushwalkers. The numbers of people using our service have grown dramatically. This trend appears certain to continue in the future as more satisfied walkers pass on the message about our reliable service, and our reasonable prices

Areas serviced include: Cradle Mountain, Lake St Clair, Walls of Jerusalem, Arm River, Higgs Track, Lake McKenzie and Frenchmans Can. Charter rates to these areas (including from Devonport airport and ferry terminal) are available on application.

Adults Children U/16 years Fares Launceston to Cradle Mt

\$25 \$20 Lake St Clair to Launceston (or vice versa) \$20

\$10 Special round trip, Launceston to Cradle Mt. and Lake St Clair to Launceston (or vice versa). \$40 \$20

A daily service operates between Launceston and Lake St Clair from 1 December to 30 March, departing Lake St Clair at 1 pm to connect with airline departures

Package to and from Cradle Mountain Lake St Clair National Park including return TAA airfares to Launceston: ex Sydney from \$252.50 ex Melhourne from \$182.90

av Adalaida from \$288.80 Subject to airline air fare increases.

There is no extra charge for individuals. Transfer of luggage to either end of the Cradle Mt - Lake St Clair National Park and luggage storage is free of charge

Pick-up is by arrangement; airports, hotels, motels, youth hostels, tourist bureau etc.

Shellite, metho and gas are also available

Bookings and enquiries to: John R Thomas, Mountain Stage Line, PO Box 433 Launceston Tasmania 7250 Phone (003) 34 0442 or any Tasmanian Government Tourist Bureau office

Mountain Stage Line

scout outdoor centre

Specialists in Bushwalking and Lightweight Camping Equipment and Advice

We are proud to announce that we are now a selected stockist of one of the world's finest rucksacks.

A.B. 65 B.C. Material: 12 oz Cordura Capacity: 65 litres

750 mm (29.5 ins) Colours: Height: Weight: 1.90 kg Back Sizes: Normal Features:

 Zip Closure Lid Pocket · Lid Accessory Straps

 Contoured Lid Snow Lock Closure Quick-Release Lid Closure Buckles

 Twin Ice Axe Straps Zip Base Compartment Suitable for

(4 Seasons) Synthetic Sleeping Bag

4 Side Compression Straps

 4 Accessory Patches • 2 Ski Bars

 Internal Aluminium Frame · Conically Shaped, Padded Hip

Harness with Bergbuckle Anatomic Shoulder Harness with **Dual Density Foam**

See this range at our new shop

Red Silver



2 Accessory Patches

berghaus

CYCLOPS ROC

 Bivi Closure Quick-Release Lid Closure Buckles

 Twin Ice Axe Facility Twin Crampon Patches

 Front Haul Loop 4 Side Compression Straps

 Internal Money Pocket Internal Aluminium Frame . Conically Shaped, Padded Hip

Harness with Bergbuckle Anatomic Shoulder Harness with Dual Density Foam Also Available: AB55

AB75

 'Mustang' Travel Packs Dart 20' Day Pack and more from the

berghow, range.

MELBOURNE, 360 LONSDALE ST. 67 1177 also at MOORABBIN, 880 NEPEAN HWY, 555 7811 and MITCHAM. 20 STATION ST. 873 5061

Mail Orders to: P.O. Box 128, Moorabbin, Vic. 3189









Rockelimbing instruction for beginners

- 1-day introductory rockclimbing trips
- · Week-end beginners rockclimbing courses both close to Melbourne and at Mt Arapiles
- · Continuing instruction available
- · Small group size-Private instruction available

For further information write to MOUNTAIN ACTIVITIES PO Box 522 Lilydale 314O or phone Graeme on (O3) 725 7516





PACKS * TENTS



TRAILWISE Great Arc Dome II

Exclusive to Mt Waverley Ski Centres 300 Stephensons Road Mt Waverley 3149 Ph 277 9127. Shops 2 & 4 Glenway Arcade Cnr Glenway Parade and O'Sullivan Road Glen Waverley 3150 Ph 232 5614

The WILDERNESS SHOP

For all your BUSHWALKING NORDIC SKI GEAR

- sales hire •
- personal service
 - 1 Carrington Road Box Hill Victoria (03) 898 3742

as mentioned in Wild no 11) it is also one of the cheapest (The well-known Whillans harness weighs 620 grams, plus karabiner.) The former point, in particular, should appeal to mountaineers and other climbers conscious of saving weight, assuming they choose to overlook its rather unaesthetic appearance. In Wild no 11 we criticized the buckle: the manufacturer claims to have improved it with a new two-piece buckle.

Paddy Pallin is importing what appears to be a copy of the Whillans harness. The Zero Point harness is from Japan and includes a number of worthwhile refinements on the



Into harness; Zero Point

Whillans design. However, at 675 grams (plus karabiner) it is even heavier. RRP about \$59

Three Cassin harnesses are being imported from Italy by Outdoor Survival. The lightest is the Yosemite model (535 grams). RRP \$55. It has some good features but the leg loops may be found rather restricting by male climbers!

Outdoor Survival is importing much of the Cassin range of climbing gear including nuts (like copies of Stoppers, Rocks and RPs), karabiners, crampons (with old-fashioned webbing straps), a figure-8 descender, helmet (heavy and not well padded) and an interesting range of ice tools. The Cousin ropes it imports from France are not the cheapest around (RRP \$115 for 50 metres of nine millimetre rope: \$125.50 bi-colour) but they look good and handle very well. They are also available in 10.5 millimetre diameter

On the local front, Katoomba Outdoors is making perhaps the ultimate chalk bag. It retails for \$18 and the poncy silk covering will soon wear off, but with fool-proof access to the white 'fix' in any situation and a unique closure system it may well be the answer to a desperate leader's prayer!

. Wild Things. Following repeated requests from readers, special binders for your valuable sets of Wild are now available. You can bind your copies into unique wilderness 'reference volumes' and avoid having to hunt for missing copies under old newspapers every time you want to plan a walk or buy some gear! \$9.95 each, including postage, from Wild

The popular 'Take a walk on the Wild side' windbeaters have been revamped. The same slogan is now printed in light blue, has been reduced in size, repositioned and accompanies the silhouette of two walkers. (See page 19.) The garment and price are unchanged, \$17.95 each, including postage, from Wild.

PLASTIC

are here in force! The world's top names, the Ace-Perception Dancer and Mirage from the UK and the Dura from New Zealand. Great for all wild water paddling. schools, groups and hire fleets All enquiries:

Canoes Plus

140 Cotham Road Kew 3101 Phone (03) 80 5934

ASPIRING HARNESS

- * Very lightweight (300gms)
- * Simple attachment point * Supports under the
- buttocks * Quick adjusting buckle
- * No load-bearing stitching
- * Webbing rated at 2200kg.



As supplied to the First Australian Everest Expedition.

For further details write to the Australian distributor: Wild Country, P.O. Box 140. Dickson, A.C.T.

Nirectories

business listed in this regular feature, please contact Wild Publications Pty Ltd, PO Box 415, Prahran, Victoria 3181. Phone (03) 240 8482.

Suppliers

Australian Capital Territory

Bushgear Australia Pty Ltd Shop 6 CAGA Centre 38 Akuna Street Canberra 2601 Ph (062) 47 7153

CSE Camping Sports Equipment Pty Ltd 11 Townshend Street Phillip 2606 Ph (062) 82 3424 Paddy Pallin Pty Ltd 46 Northbourne Avenue Canberra 2601 Ph (062) 47 8949

Scout Outdoor Centre 89 Petrie Plaza Civic Square 2608 Ph (062) 47 8439

Stefan Jurkiewicz Camping Centre 47 Wollongong Street Fyshwick 2609 Ph (062) 80 6519

The Wilderness Shop Upstairs 35 Fast Row

Civic Square 2608 Ph (062) 49 8011 Wild Countr

59 Woolley Street Dickson 2602 Ph (062) 47 4539

New South Wales

B-Line Boats & Canoes Pty Ltd PO Box 39 Gloucester 2422 Ph (02) 727 9622

Canoe & Camping Supplies 265 Victoria Road Gladesville 2111

Ph (02) 89 5590 Canoe Specialists

5 Wongala Crescent Beecroft 2119 Beecroft 2119 Ph (02) 84 3934

Caving Equipment 230 Sussex Street Sydney 2000 Ph (02) 264 2095 Damart 58 Clarence Street

Sydney 2000 Ph (02) 29 2366 Fastwood Camping Centre

Pty Ltd 3 Trelawney Street Eastwood 2122 Ph (02) 858 2775

High Tops Equipment PO Box 98 Glenbrook 2773 Ph (047) 58 6519

Katoomba Outdoor Centre Pty Ltd 285 Main Street Katoomba 2780 Ph (047) 82 3467

Leisure Coast Canoe Services 492 Princess Highway Woonona 2517 Ph (042) 84 1616

Mountain Designs 494 Kent Street Sydney 2000 Ph (02) 267 8238

Mountain Equipment Pty Ltd 291 Sussex Street Sydney 2000 Ph (02) 264 3146

Nordic Ski Centre 38 Kingsway Cronulla 2230 Ph (02) 523 7222

74 Clarence Street Sydney 2000 Ph (02) 29 7792

Paddy Pallin Ptv Ltd 527 The Kingsway Miranda 2228 Ph (02) 525 6829

Paddy Pallin Pty Ltd 61 Macquarie Street Parramatta 2150 Ph (02) 633 3746

Paddy Pallin Pty Ltd 69 Liverpool Street Sydney 2000 Ph (02) 264 2685

Paddy Pallin 252 Oxford Street Woollahra 2025 Ph (02) 387 4082

Scout Outdoor Centre 47 Beecroft Road Epping 2121 Ph (02) 868 2555

Southern Cross Equipment Ptv Ltd 399 Victoria Avenue Chatswood 2759 Ph (02) 412 3372

Southern Cross Equipment Pty Ltd 222 Pacific Highway Hornsby 2077

Ph (02) 476 5566 Southern Cross Equipment Pty Ltd 28 Phillip Street Parramatta 2150 Ph (02) 633 4527

Southern Cross Equipment

Pty Ltd 355 Kent Street Sydney 2000 Ph (02) 29 4526

The Wilderness Shoo 399 Pitt Street Sydney 2000 Ph (02) 267 7929 Three Peaks

49 Ramsay Street Haberfield 2045 Ph (02) 797 0233

Wilderness Supplies 26 Sharp Street Cooma 2630 Ph (0648) 21 587

Adventure Camping Equipment 11 Ross River Road Mundingburra 4812 Ph (077) 75 6116

Austen Canoes 29 Ipswich Road Woolloongabba 4102 Ph (07) 391 8588

Feather Your Nest 21 Hill Street Toowoomba 4350 Ph (076) 38 1943

Ian Aitchison & Co Pty Ltd 42 Douglas Street Milton 4064 Ph (07) 369 0965

Jim the Backpacker Shop A21 Queens Arcade 77 Queen Stree 77 Queen Stre Brisbane 4000 Ph (07) 229 6609

Mountain Experience 99 Mary Street Brisbane 4000 Ph (07) 221 6756

Queensland Conservation Council Billabong Book Shop 2 Queen Street Brisbane 4000

Ph (07) 231 4696 Rosco Canoes 382 Lutwyche Road Windsor 4053 Ph (07) 57 7465

Scout Outdoor Centre 132 Wickham Street Fortitude Valley 4006 Ph (07) 52 4744

The Camping Centre 25 Ipswich Road Woolloongabba 4102 Ph (07) 391 6930

Torre Mountain Craft Pty Ltd Shop 10 600 Sherwood Road Sherwood 4075 Ph (07) 379 5549

South Australia

Bon Voyage Enterprises (Canoes) 2 Sandilands Street Lockleys 5032 Ph (08) 356 6237 Flinders Camping

296 Gilles Street Adelaide 5000 Ph (08) 223 1913 The Scout Shop & Outdoor

Centre 107 Pirie Street Adelaide 5000 Ph (08) 223 5544 The Wilderness Shop 291A Rundle Street

Adelaide 5000 Ph (08) 223 6917 Thor Adventure Equipment 40 Waymouth Street Ph (08) 212 7857

Thor Adventure Equipment 213B Unley Road Malvern 5061 Ph (08) 271 9640

Allgoods Pty Ltd 71 York Street Launceston 7250 Ph (003) 31 3644

Canoe, Surf & Sail 144 William Street Devonport 7310 Ph (004) 24 4314

Canoe, Surf & Sail 125 St John Street Launceston 7250 Ph (003) 31 6766 Canoe, Surf & Sail

93 Main Street Penguin 7316 Ph (004) 37 2791

Jolly Swagman 107 Elizabeth Street Hobart 7000 Ph (002) 34 3680 Outdoor Equipment 135 Elizabeth Street Hobart 7000 Ph (002) 34 6213

Paddy Pallin 32 Criterion Street Ph (002) 31 0777

The Scouting & Camping Shop 107 Murray Street Hobart 7000 Ph (002) 34 3885

The Wilderness Shoo 155 Liverpool Street Hobart 7000 Ph (002) 34 9370

Young's Outdoor Gear 35 Wilson Street Burnie 7320 Ph (004) 31 6706

Victoria

Auski Sales Ptv Ltd 9 Hardware Street Melbourne 3000 Ph (03) 67 1412

Bendigo Adventure Activities 163 View Street Bendigo 3550 Ph (054) 43 8620 Bush & Mountain Sports Pty Ltd 204 La Trobe Street

Melbourne 3000 Ph (03) 662 3349 Bushgear Australia Pty Ltd 377 Little Bourke Street Melbourne 3000 Ph (03) 67 3354

Cance Equip Shop 11 427 Hampton Street Hampton 3188 Ph (03) 598 8814

Canoes Plus 140 Cotham Road Kew 3101 Ph (03) 80 5934 Chandler's Outdoor & Ski 71 Fryers Street

Shepparton 3630 Ph (058) 21 4228 Current Craft Plastic Kavaks 360 Spencer Street Melbourne 3000

Ph (03) 328 3453 Eastern Mountain Centre 401 Riversdale Road Camberwell Junction 3123 Ph (03) 82 7229

Eastern Mountain Centre 115 Canterbury Road Heathmont 3135 Ph (03) 729 7787

Erskine's Geelong Disposals 17 Mercer Street Geelong 3220 Ph (052) 95 526

Marechal Camping Supplies 37 Lonsdale Street Dandenong 3175 Ph (03) 793 2711

Melbourne Map Centre 740 Waverley Road Chadstone 3148 Ph (03) 569 5472

Mountain Designs 61 Hardware Street Melbourne 3000 Ph (03) 67 2586 Mountain Sports Wodonga 25 South Street Wodonga 3690 Ph (060) 24 5488

Mt Waverley Ski & Hire Cnr Glenway Arcade and O'Sullivan Road Glen Waverley 3150 Ph (03) 232 5614

Mt Waverley Ski & Hire 300 Stephensons Road Mt Waverley 3149 Ph (03) 277 9127

Nordic Ski & Backpacking (Vic) Pty Ltd 77 Murrumbeena Road Murrumbeena 3163 Ph (03) 569 8368

Out & About Outdoor Equipment 275 Hampton Street Hampton 3188 Ph (03) 598 7870 Outdoor Action

51 Bakery Square Melton 3337 Ph (03) 743 1356 Outdoor Gear 1213A Sturt Street

Ballarat 3350 Ph (053) 32 7516

Outgear Wilderness Equipment 12 Williamsons Road Maribyrnong 3032 Ph (03) 317 8886

Why the Downia the better



This is the most important single attribute of a bap, All down sleeping baps are not created equal, even if they are started to have the same warmth factor, i.e. 550 loft. (Loft is the volume of entirapped or insulating air space that I cunc of down courses under spaceful test conditions. 550 loft of the conditions. 550 loft of the conditions. 550 loft of the conditions.

space per ounce of down.)

Downia are recognised experts in lofting with over 50 years experience in the field.

Our down not only meets or succeeds all conventional lofting values but is almost infinitely soft and long-lasting in its ability to contour itself to your body and to recover its full lofted volume after being compressed.

Shell and Liner Materials:

We use light, tough 1.9 oz downprof on his used exclusively on all outers, walls and on the inners of every bag, with the exception of the Ireeline 620 where Downia use a superfine 2.2 oz cotton inner, accepting that the extra comfort is worth the slight (3 oz square yard) additional weight.

Stitching

All stitching is downproof. We use a special long-life high-strength thread compatible with the other high quality materials.

Shape

The shape of a sleeping bag determines both the warmth and weight. Basically there are three shapes that a sleeping bag can be made in: Rectangular where the sides of the bag are parallel; Modified where the bag narrows towards the bottom slightly; or Munmy where the bag tapers to follow the body shape.

Internal Construction

 BOX WALL. The most effective, valuefor-money type of construction used in sleeping bags today, Used on all Downia Treeline and Snowfield bags. All walls are the same super-tough 1.9 or Ripstop mylon as the bag outer.

The advanced slant wall gives excellent down stabilisation for more extreme conditions. Although more expensive and heavier than a normal box wall these disadvantages are more than offset by the extra warmth gained. Used on the Downia Glacier 1100.

2. SLANT WALL. (Advanced Box).

Draught Excluder:

All Downia sleeping bags are fitted with a draught excluder which covers the entire length of the zip. This eliminates draughts and consequent heat loss from that area.

Hoods

All Downia hoods are continuous with the main body of the bag and share the same internal construction; box walling on the Treeline and Snowfields and stant walling on the Glacier. All hoods are fitted with a locking cord grip and and may be adjusted anywhere from from fully onen to fully closed.



Designed and made in Australia. Sanitized for lasting freshness.

Design/style	Fill weight	Total weight	Rating	Coastal 3 season	Mountain summer	Coastal winter	Mountain 3 season	Mountain winter	Ski touring	Expedition
620 Treeline Modified Rectangular	620 grams	1.6 kilograms	0°C	Excellent	Excellent	Good	Good		-	-
600 Treeline Mummy	600	1.3	-3° C	Good	Very good	Very good	Excellent	Acceptable	-	-
920 Snowfield Modified Rectangular	920	1.9	-8° C	Good	Good	Excellent	Excellent	Very good	Acceptable	-
900 Snowfield Mummy	900	1.8	-12° C	Acceptable	Good	Very good	Very good	Excellent	Very good	-
1100 Glacier Mummy	1100	2.0	-20° C		_	Acceptable	Acceptable	Very good	Excellent	Excellent

Outsports 340B Hawthorn Road Caulfield 3162 Ph (03) 523 5727 Paddy Pallin Pty Ltd

5 Hardware Street Melbourne 3000 Ph (03) 67 9485 Ray's Tent City Bush Hut 195 Nepean Highway Gardenvale 3185 Ph (03) 596 3816

Sam Bear Specialist Camping Store 225 Russell Street Melbourne 3000 Ph (03) 663 2191

Scout Outdoor Centre 360 Lonsdale Street Melbourne 3000 Ph (03) 67 1177

Scout Outdoor Centre 20 Station Street Mitcham 3132 Ph (03) 873 506 Scout Outdoor Centre 880 Nepean Highway Moorabbin 3189

Ph (03) 555 7811 The Canoe Factory 22 High Street Glen Iris 3146 Ph (03) 25 5159

The Wilderness Centre Shop 3 Equitable Place Melbourne 3000 Ph (03) 663 1561

The Wilderness Shop Ptv Ltd 1 Carrington Road Box Hill 3128

Ph (03) 898 3742 Western Australia

Big Country Camping & Tramping Specialists 7A/59 Jewell Street East Perth 6000 Ph (09) 325 5984

Fleetwood Stores 1964 Albany Highway Maddington 6109 Ph (09) 459 2800

Fleetwood Stores 245 Great Eastern Highway Midland 6056 Ph (09) 274 3426

Fleetwood Stores 862 Hay Street Perth 6000 Ph (09) 322 4774 Fleetwood Stores

108 Wanneroo Road Ph (09) 349 0066 Fleetwood Stores

14 Asquith Street Victoria Park 6100 Ph (09) 362 4611

Pilbara Outdoor Equipment WA Pty Ltd PO Box 344 Tom Price 6751 Ph (091) 89 1416

The Canne Shop 924 Albany Highway East Victoria Park 6101 Ph (09) 362 6864

The Scout Shop and Outdoor Centre 581 Murray Street Perth 6000 Ph (09) 321 5259

Western Canoe Centre 261 Queen Victoria Street North Fremantle 6159 Ph (09) 335 9173

Wilderness Equipment PO Box 83 Fremantle 6160 Ph (09) 335 2813

New Zealand

Aln Sports Mountain Shop 235 High Street Christchurch Ph (03) 67 148

Alp Sports Wellington Ltd Public Trust Office 125 Lambton Quay Wellington Ph (04) 72 0673 Mountain Guides New Zealand PO Box 93

Ph (Twizel) 737 The Wilderness Shop 101 Lower Stuart Street

Ph (Dunedin) 77 3679 Hong Kong

Mountain Services International Ltd Room 102, 32 Morrison Hill Road Ph (Hong Kong) 573 3313

Adventure activities

Australian Capital Territory

Canoe Tours Australia Ptv Ltd 8 Barton Court Bourke Street Barton 2600 Ph (062) 73 3983

New South Wales

Adventure Travel 1st Floor 117 York Street Sydney 2000 Ph (02) 264 6033

Associated Research Exploration & Aid (AREA) GPO Box 4692

Sydney 2001 Australian Himalayan Expeditions 159 Cathedral Street Waallaamaalaa 2011

Ph (02) 357 3555 860 Military Road Mosman 2088 Ph (02) 960 1677

Encounter Overland 75 King Street Sydney 2000 Ph (02) 29 1511

Kosciusko Expeditions c/- Paddy Pallin Jindabyne PO Box 72 Jindabyne 2627 Ph (0648) 62 458

Leisure Coast Canoe Services 492 Princess Highway Woonona 2517

Ph (042) 84 1616 Macleay Packsaddlers Horseriding and Canoeing Treks

Bellbrook Via Kempsey 2440 Ph (065) 67 2040 New Guinea Expeditions

4th Floor 28 O'Connell Street Sydney 2000 Ph (02) 231 6066 Nymboida Whitewater Rafting

Expeditions PO Box 224 Woolgoola 2450 Ph (066) 54 1788

Peregrine Expeditions 58 Pitt Street Sydney 2000 Ph (02) 241 1640

Rockcraft Climbing School 285 Main Street Katoomba 2780 Ph (047) 82 3467

Somerset Outdoor Education Centre (Colo River) c/- 222 Pacific Highway Hornsby 2077 Ph (02) 476 5566

Wilderness Expeditions 26 Sharn Street Cooma 2630 Ph (0648) 21 587

Wilderness Expeditions 10th Floor 2 O'Connell Street Sydney 2000 Ph (02) 232 7400

Australian Himalayan Expeditions Jim the Backnacker Shop A21 Queens Arcade 77 Queen Street Brichana 4000 Ph (07) 229 6609 Climb High

Broadway 4006 Ph (07) 52 8804 Down River Canoe Cruises 363 Gympie Road Strathpine 4500 Ph (07) 205 2098

interNATIONAL PARKtours Binna-Burra Lodge Beechmont 4211 Ph (075) 33 3583

Mountain Craft hop 10 600 Sherwood Road Sherwood 4075 Ph (07) 379 5549

South Australia

Mountain Adventure 40 Waymouth Street Adelaide 5000 Ph (08) 212 7857 Peregrine Expeditions 8th Floor 144 North Terrace Adelaide 5000 Ph (08) 212 3760

Riverland Canoeing Adventures PO Box 962 Loxton 5333 Ph (085) 84 1494

Thor Adventure Travel 40 Waymouth Street Adelaide 5000 Ph (08) 212 7857

Tasmania

Bushwalkers Bus Service PO Box 433 Launceston 7250 Ph (003) 34 0442

Bushwalkers Transport 186 Campbell Street Hobart 7000 Ph (002) 34 2226 Craclair Tours

PO Box 516 Devonport 7310 Ph (004) 24 3971 Franklin River Transport PO Box 446

Burnie 7320 Ph (004) 31 3841 Maxwell's Cradle Mountain Lake St Clair Bus Service Wilmot 7310 Ph (004) 92 1431

Par-Avion PO Box 300 Sandy Bay 7005 Ph (002) 48 5390 Tasair Pty Ltd Cambridge Aerodrome Cambridge 7170

Ph (002) 48 5088 Wilderness Recreation

Pty Ltd PO Box 446 Burnie 7320 Ph (004) 31 3841 Wilderness Tours c/- Robert H Geeves Arve Road Geeveston 7116 Ph (002) 97 1384

Victoria

Australian and New Zealand Scientific Exploration Society PO Box 174 Albert Park 3206 Ph (03) 529 3783

Australian Himalayan Expeditions Suite 602 126 Wellington Parade East Melbourne 3002 Ph (03) 419 2333

Base Camp & Beyond 'Musbury' PO Box 37 Halls Gap 3381 Ph (053) 56 4300

Bogong Jack Adventures PO Box 209 Wangaratta 3677 Ph (057) 21 3145 High Country Adventure Pty Ltd PO Box 287

Mansfield 3722 Ph (057) 75 2511 Kim Carrigan Climbing Guide PO Box 20 Natimuk 3409 Ph (053) 87 1329

Mountain Activities PO Box 522 Lilvdale 3140 Ph (03) 725 7516 The Outdoor People Pty Ltd PO Box 317

Croydon 3136 Ph (03) 720 1001 Outdoor Travel Centre

1st Floor 377 Little Bourke Street Melbourne 3000 Ph (03) 67 7252

340B Hawthorn Road Caulfield 3162 Ph (03) 523 5727 Peregrine Expeditions 343 Little Collins Street Melbourne 3000 Ph (03) 60 1121

Selecta Tours Ltd PO Box 232 Glen Waverley 3150 Ph (03) 277 7203

Sheer Height PO Box 20 Natimuk 3409 Ph (053) 87 1329

Snowy River Expeditions PO Buchan 3885 Ph (051) 55 9373 Survival Schools 130 Auburn Road Hawthorn 3122

Ph (03) 818 5388

Wildtrek Ltd 414 Bourke Street Melbourne 3000 Ph (03) 67 7196 Western Australia

Sheffield House

Access to Adventure Room 220A 713 Hay Street Mall Perth 6000 Ph (09) 321 2630

Australian Himalayan Expeditions — Sundowners Travel 2nd Floor 133 St Georges Terrace Perth 6000 Ph (09) 321 2335

New Zealand

Alpine Guides (Westland) Ltd PO Box 38 Fox Glacier Ph (Fox Glacier) 825

Alpine Recreation Canterbury PO Box 75 lake Tekapo Ph (05056) 736

Alpine Ski Touring Ski Guides NZ Ltd PO Box 177 Ph (Wanaka) 7930

Helicopter Skiing Ski Guides NZ Ltd PO Box 177 Ph (Wanaka) 7930

Mountain Guides New Zealand PO Box 93 Ph (Twizel) 737

Mountain Recreation Professional Mountaineers

PO Box 204 Ph (Wanaka) 7330

Rough River Rafting Company PO Box 2392

Ph (073) 80 233 School of Mountaineering Alpine Guides Mt Cook Ltd PÓ Box 20 Mt Cook National Park Ph (Mt Cook) 834

Selecta Tours Ltd PO Box 761 Ph (Taupo) 88 355 Venture Treks Ltd PO Box 37-610 Parnel

Ph (Auckland) 79 9855 White Water Rafts PO Box 53 Queenstown Ph (Queenstown) 116

Papua New Guinea

Australian Himalayan Expeditions Pacific Expeditions PO Box 132

Port Moresby Ph (Port Moresby) 25 7803

Sherpa Co-operative Trekking (P) Ltd PO Box 1338 Kamal Pokhari Kathmandu Ph (Kathmandu) 15 887

Classifieds

Deadlines: 15 January (autumn issue), 15 (winter), 15 July (spring), 15 October (sum Advertisements will be inserted in

available issue. We reserve the right to alter or reject any advertisement and will not be held responsible for errors, although every care is taken to avoid

them. All advertisements are accepted on the express condition that they do not in any way infringe the Trade Practices Act or violate any existing copyright or Trade Mark. Send order and payment to Wild Publications Pty Ltd, PO Box 415, Prahran, Victoria 3181.

Franklin River Guide Maps. Seven sectional maps, detailing CAMPSITES, RAPIDS, CAVES and other features and landmarks. These lucid and accurate maps have expounded marginal notes, are coloured and coded, waterproofed and are designed for glance reference whilst in transit on water, Contact WILDERNESS GUIDES, (08) 296 7093

Land for Sale: Coffs Harbour/Dorrigo Area. Beautiful rainforest and undulating bush land with waterfalls and wildlife. On Nymboida and Bielsdown

Bivers 100 acres \$40,000 six acres \$12,000 Phone (066) 55,8588

Topographic Maps, Natmaps cover Australia at 1:250,000 scale and popular areas at 1:100,000 scale. Free cotologues BO Bay 21 Belconnen ACT 2616, or from accredited retailers.

Club News

are invited to use this column to se their existence for the benefit of novices and newcomers to their areas, to keep members in touch and to give notice of their

members in touch and to give house or their meetings and other events. 20 cents a word (minimum \$3.00) for the first 50 words, then 50 cents a word, protect Send notice and payment to Wild Publications Pty Ltd, PO Box 415, Prahran, Victoria 3181. ANU Mountaineering Club meets first

Wednesday each month at 8 pm at Australian National University. Canberra, Activities include canoeing. climbing, bushwalking, skiing and rogaining. Interested people should contact the club through the ANU Sports Union, the President (062) 81 0357 or Treasurer (062) 49 4494

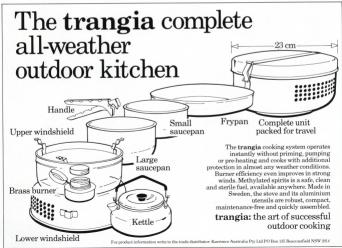
Binna Burra Bushwalkers Club, Brisbane, are celebrating their twentieth year and wish to contact former members. Please write to GPC Box 1274, Brisbane 4001 by end October if possible.

Freycinet Foot Flogging Club (Tasmania) is holding its inaugural ru n Freycinet National Park. 30 December 1984. Two runs: Freycinet Feat 26 kilometres, 9.30 am start, and Coles Bay Canter 9.5 kilometres, 11.00 am start. Start Wineglass Bay car-park Enter on day. Enquiries, camping: Rob Tatchell PO Box 453, Avoca, Tasmania 7213. Phone (003) 84 2242

The Victorian Climbing Club meets at 8 pm on the last Thursday of each month (except December; and second last Thursday in September) at 188 Gatehouse Street, Parkville 3052. Visitors and new members interested in rockclimbing are welcome. Contact the Secretary GPO Box 1725P. Melbourne. Victoria 3001.



Each year many of our readers give their friends gift subscriptions to Wild particularly at Christmas. To make this easier, this issue we enclose a special 'gift subscription card' (for a friend or yourself!) as well as our usual Wild Order Form. As this is our last issue for 1984 you should order aift subscriptions now to allow us plenty of time to send a special gift card to the recipients telling them of your gift. and to start their subscription in time for Christmas





EDELWEISS ROPES REALLY ARE THE BEST LINEUPANY CLIFF

The Teufelberger family has been producing ropes and cables in Austria since 1632 over 350 years of expertise and tradition Ropes such as the EXTREM 8000+, a series of ropes used when maximum strength and durability is required. The Edelweiss GENTLE series. ropes that are soft and easy to handle. And now the new ULTRALIGHT series - a revolution in performance and weight (21/2 kg for a 40m rope!). All these ropes are available in 8.7mm and 11mm diameters to suit your climbing style and all are treated with the famous Edelweiss EVERDRY process. Edelweiss were the first to realize the importance of this treatment, for the safety and ease of handling it gives and the extra usable life it gains for your ropes, no matter what the

EDELWEISS **

prevailing climate of your

favourite climbs.

Climbers like Reinhold Messner and Jim Donini trust their lives to Edelweiss quality and in their opinion a climber should use nothing but the best, Edelweiss,

Ouentin Chester on Muesli, 15, Morialta Gorge, S.A.

Sydney (City) 69 Liverpool St. 264 2685 Paramatta 61 Macquarie St. 633 3746 Canberra 46 Northbourne Ave. 47 8949 Melbourne 55 Hardham St. 67 4945

55 Hardware St. 67 4845 Miranda 527 Kingsway 525 6829 Woollahra

Woollahra 252 Oxford St. 387 4082 Jindabyne Kosciusko Rd, 62 458

Hobart 32 Criterion St. 31 0777 Adelaide

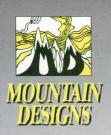
City 40 Waymouth St. 212 7857 Unley 213B Unley Rd.

271 9640 Mail Order Service

PO Box 175 Redfern NSW 2016.

Paddy Pallin Adventure Shops

Dedicated to those whose challenge comes from within.



Mark Moorhea (downclimbing 40 metre chain slings) and Ro Mackenzie wearir Mountain Design Gore-Tex wind sui

> during an ep retreat in stor prior to the successful fir

pine-style ascen with Jon Muir ar raig Nottle, of th South-west Ridg

Himalayas, Pho Nottle Posters this photo a available fro

First Australian Mt Everest Expedition '84

OFFICIAL SUPPLIFE

267 8238 MELBOURNE 61 Hardware Street (03)

BRISBANE 99 Mary Street (07) 221 6